SEQUENCE LISTING

SEQ ID 1

 $\tt ATGGGGCAAACTAAAAGTAAAATTAAAAGTAAATATGCCTCTTATCTCAGCTTTATTAAAAATTCTTTTAAAAAGAGGGGGAGTTAAAGTATCTACAA$ AAAATCTAATCAAGCTATTTCAAATAATAGAACAATTTTGCCCATGGTTTCCAGAACAAGGAACTTTAGATCTAAAAGATTGGAAAAGAATTGGTAA GGAACTAAAACAAGCAGGTAGGAAGGGTAATATCATTCCACTTACAGTATGGAATGATTGGGCCATTATTAAAGCAGCTTTAGAACCATTTCAAACA TACATTGCGAATATGTAGCAGAGCCGGTAATGGCTCAGTCAACGCAAAATGTTGACTATAATCAATTACAGGAGGTGATATATCCTGAAACGTTAAA ATTAGAAGGAAAAGGTCCAGAATTAGTGGGGCCATCAGAGTCTAAACCACGAGGCCACAAGTCCTCTTCCAGCAGGTCAGGTGCCTGTAACATTACAA CCTCAAAAGCAGGTTAAAGAAAATAAGACCCAACCGCCAGTAGCCTATCAATACTGGCCTCCGGCTGAACTTCAGTATCGGCCACCCCCAGAAAGTC AGTATGGATATCCAGGAATGCCCCCAGCACCACAGGGCAGGGCGCCATACCCTCAGCCGCCCACTAGGAGACTTAATCCTACGGCACCACCTAGTAG AGTATGGACCCAACTCCCCTTATATGAGGACATTATTAGATTCCATTGCTCATGGACATAGACTCATTCCTTATGATTGGGAGATTCTGGCAAAATC $\tt GTCTCTCACCCTCTCAATTTTACAATTTAAGACTTGGTGGATTGATGGGGTACAAGAACAGGTCCGAAGAATAGGGCTGCCAATCCTCCAGTT$ AACATAGATGCAGATCAACTATTAGGAATAGGTCAAAATTGGAGTACTATTAGTCAACAAGCATTAATGCAAAAATGAGGCCATTGAGCAAGTTAGAG $\tt CTATCTGCCTTAGAGCCTGGGAAAAAATCCAAGACCCAGGAAGTACCTGCCCCTCATTTAATACAGTAAGACAAGGTTCAAAAGAGCCCTATCCTGA$ $\tt TTTTGTGGCAAGGCTCCAAGATGTTGCTCAAAAGTCAATTGCTGATGAAAAAGCCCGTAAGGTCATAGTGGAGTTGATGGCATATGAAAACGCCAAT$ $\verb|CCAAGATGTAAAAAAGGAAAACATTGGGCTAGTCAATGTCGTTCTAAATTTGATAAAAATGGGCAACCATTGTCGGGAAACGAGCAAAGGGGCCAGC|$ $\tt CTCAGGCCCCACAACAACCTGGGGCATTCCCAATTCAGCCATTTGTTCCTCAGGGTTTTCAGGGACAACAACCCCCACTGTCCCAAGTGTTTCAGGG$ AATAAGCCAGTTACCACAATACAACAATTGTCCCCCGCCACAAGCGGCAGTGCAGCAG

SEQ ID 2

AAAATCTAATCAAGCTATTTCAAATAATAGAACAATTTTGCCCATGGTTTCCAGAACAAGGAACTTTAGATCTAAAAGATTGGAAAAGAATTGGTAA ${\tt GGAACTAAAACAAGCAGGTAGGAAGGGTAATATCATTCCACTTACAGTATGGAATGATTGGGCCCATTATTAAAGCAGCTTTAGAACCATTTCAAACA}$ TACATTGCGAATATGTAGCAGAGCCGGTAATGGCTCAGTCAACGCAAAATGTTGACTATAATCAATTACAGGAGGTGATATATCCTGAAACGTTAAA ATTAGAAGGAAAAGGTCCAGAATTAGTGGGGCCATCAGAGTCTAAACCACGAGGCACAAGTCCTCTTCCAGCAGGTCAGGTGCCTGTAACATTACAACCTCAAAAGCAGGTTAAAGAAAATAAGACCCAACCGCCAGTAGCCTATCAATACTGGCCTCCGGCTGAACTTCAGTATCGGCCACCCCCAGAAAGTC AGTATGGATATCCAGGAATGCCCCCAGCACCACAGGGCAGGGCGCCCATACCCTCAGCCGCCCACTAGGAGACTTAATCCTACGGCACCACCTAGTAG GGAGAAGGAGCCCAAGAGAGGGAGAGCCTCCCACAGTTGAGGCCAGATACAAGTCTTTTTCGATAAAAAAAGCTGAAAAGATATGAAAGAGGGAGTAAAAA AGTATGGACCCAACTCCCCTTATATGAGGACATTATTAGATTCCATTGCTCATGGACATAGACTCATTCCTTATGATTGGGAGATTCTGGCAAAATCGTCTCTCTCACCCTCTCAATTTTTACAATTTAAGACTTGGTGGATTGATGGGGTACAAGAACAGGTCCGAAGAAATAGGGCTGCCAATCCTCCAGTT AACATAGATGCAGATCAACTATTAGGAATAGGTCAAAATTGGAGTACTATTAGTCAACAAGCATTAATGCAAAAATGAGGCCATTGAGCAAGTTAGAG CTATCTGCCTTAGAGCCTGGGAAAAAATCCAAGACCCAGGAAGTACCTGCCCCTCATTTAATACAGTAAGACAAGGTTCAAAAGAGCCCTATCCTGA TTTTGTGGCAAGGCTCCAAGATGTTGCTCAAAAGTCAATTGCTGATGAAAAAGCCCCGTAAGGTCATAGTGGAGTTGATGGCATATGAAAACGCCAAT CCTGAGTGTCAATCAGCCATTAAAGCCATTAAAAGGAAAGGTTCCTGCAGGATCAGATGTAATCTCAGAATATGTAAAAGCCTGTGATGGAATCGGAG GAGCTATGTATAAAGCTATGCTTATGGCTCAAGCAATAACAGGAGTTGTTTTAGGAGGACAAGTTAGAACATTTGGAAGAAAATGTTATAATTGTGG CCAAGATGTAAAAAAGGAAAACATTGGGCTAGTCAATGTCGTTCTAAATTTGATAAAAATGGGCAACCATTGTCGGGAAACGAGCAAAAGGGGCCAGC $\tt CTCAGGCCCCACAACAACTGGGGCATTCCCAATTCAGCCATTTGTTCCTCAGGGTTTTCAGGGACAACCACCCCCACTGTCCCCAAGTGTTTCAGGG$ AATAAGCCAGTTACCACAATACAACAATTGTCCCCCGCCACAAGCGGCAGTGCAGCAGTAG

SEQ ID 3

SEQ ID 4

SEQ ID 5

MGQTKSKIKSKYASYLSFIKILLKRGGVKVSTKNLIKLFQIIEQFCPWFPEQGTLDLKDWKRIGKELKQAGRKGNIIPLTVWNDWAIIKAALEPFQT
EEDSVSVSDAPGSCIIDCNENTRKKSQKETEGLHCEYVAEPVMAQSTQNVDYNQLQEVIYPETLKLEGKGPELVGPSESKPRGTSPLPAGQVPVTLQ
PQKQVKENKTQPPVAYQYWPPAELQYRPPPESQYGYPGMPPAPQGRAPYPQPPTRRLNPTAPPSRQGSKLHEIIDKSRKEGDTEAWQFPVTLEPMPP
GEGAQEGEPPTVEARYKSFSIKKLKDMKEGVKQYGPNSPYMRTLLDSIAHGHRLIPYDWEILAKSSLSPSQFLQFKTWWIDGVQEQVRRNRAANPPV
NIDADQLLGIGQNWSTISQQALMQNEAIEQVRAICLRAWEKIQDPGSTCPSFNTVRQGSKEPYPDFVARLQDVAQKSIADEKARKVIVELMAYENAN
PECQSAIKPLKGKVPAGSDVISEYVKACDGIGGAMYKAMLMAQAITGVVLGGQVRTFGRKCYNCGQIGHLKKNCPVLNKQNITIQATTTGREPPDLC
PRCKKGKHWASQCRSKFDKNGQPLSGNEQRGQPQAPQQTGAFPIQPFVPQGFQGQQPPLSQVFQGISQLPQYNNCPPPQAAVQQ

SEQ ID 6

MGQTKSKTKSKYASYLSFIKILLKRGGVRVSTKNLIKLFQIIEQFCPWFPEQGTLDLKDWKRIGEELKQAGRKGNIIPLTVWNDWAIIKAALEPFQT KEDSVSVSDAPGSCVIDCNEKTGRKSQKETESLHCEYVTEPVMAQSTQNVDYNQLQGVIYPETLKLEGKGPELVGPSESKPRGPSPLPAGQVPVTLQ PQTQVKENKTQPPVAYQYWPPAELQYLPPPESQYGYPGMPPALQGRAPYPQPPTVRLNPTASRSGQGGTLHAVIDEARKQGDLEAWRFLVILQLVQA GEETQVGAPARAETRCEPFTMKMLKDIKEGVKQYGSNSPYIRTLLDSIAHGNRLTPYDWESLAKSSLSSSQYLQFKTWWIDGVQEQVRKNQATKPTV NIDADQLLGTGPNWSTINQQSVMQNEAIEQVRAICLRAWGKIQDPGTAFPINSIRQGSKEPYPDFVARLQDAAQKSITDDNARKVIVELMAYENANP ECQSAIKPLKGKVPAGVDVITEYVKACDGIGGAMHKAMLMAQAMRGLTLGGQVRTFGKKCYNCGQIGHLKRSCPVLNKQNIINQAITAKNKKPSGLC PKCGKGKHWANOCHSKFDKDGOPLSGNRRGOPOAPQOTGAFPVQLFVPQGFQGQQPLQKIPPLQGVSQLQQSNSCPAPQQAAPQ

SEQ ID 7

MGQTKSKIKSKYASYLSFIKILLKRGGVKVSTKNLIKLFQIIEQFCPWFPEQGTSDLKDWKRIGKELKQAGRKGNIIPLTVWNDWAIIKAALEPFQT EEDSISVSDAPGSCLIDCNENTRKKSQKETESLHCEYVAEPVMAQSTQNVDYNQLQEVIYPETLKLEGKGPELMGPSESKPRGTSPLPAGQVLVRLQ PQKQVKENKTQPQVAYQYCRWLNFSIGHPQKVSMDIQECPQHHRAGRHTISRPLGDLILWHHLVDRVVNYMKLLINQERKEILRHGNSQ

SEQ ID 8

MPPAPQGRAPYHQPPTRRLNPMAPPSRQGSELHEIIDKSRKEGDTEAWQFPVTLEPMPPGEGAQEGEPPTVEARYKSFSIKMLKDMKEGVKQYGPNS
PYMRTLLDSIAYGHRLIPYDWEILAKSSLSPSQFLQFKTWWIDGVQEQVRRNRAANPPVNIDADQLLGIGQNWSTISQQALMQNEAIEQVRAICLRA
WEKIQDPGSTCPSFNTVRQGSKEPYPDFVARLQDVAQKSIADEKAGKVIVELMAYENANPECQSAIKPLKGKVPAGSDVISEYVKACDGIGGAMHKA
MLMAQAITGVVLGGQVRTFGGKCYNCGQIGHLKKNCPVLNKQNITIQATTTGREPPDLCPRCKKGKHWASQCRSKFDKNGQPLSGNEQRGQPQAPQQ
TGAFPIQPFVPQGFQGQQPPLSQVFQGISQLPQYNNCPSPQAAVQQ

SEQ ID 9

MGQTKSKIKSKYASYLSFIKILLKRGGVKVSTKNLIKLFQIIEQFCPWFPEQGTLDLKDWKRIGKELKQAGRKGNIIPLTVWNDWAIIKAALEPFQT
EEDSVSVSDAPGSCIIDCNENTGKKSQKETEGLHCEYVAEPVMAQSTQNVDYNQLQEVIYPETLKLEGKGPELVGPSESKPRGTSPLPAGQVPVTLQ
PQKQVKENKTQPPVAYQYWPPAELQYRPPPESQYGYPGMPPAPQGRAPYPQPPTRLNPTAPPSRQGSKLHEIIDKSRKEGDTEAWQFPVTLEPMPP
GEGAQEGEPPTVEARYKSFSIKKLKDMKEGVKQYGPNSPYMRTLLDSIAHGHRLIPYDWEIQAKSSLSPSQFLQFKTWWIDGVQEQVRRNRAANPPV
NIDADQLLGIGQNWSTISQQALMQNEAIEQVRAICLRAWEKIQDPGSTCPSFNTVRQGSKEPYPDFVARLQDVAQKSIADEKARKVIVELMAYENAN
PECQSAIKPLKGKVPAGSDVISEYVKACDGIGGAMHKAMLMAQAITGVVLGGQVRTFGRKCYNCGQIGHLKKNCPVLNKQNITIQATTTGREPPDLC
PRCKKGKHWASQCRSKFDKNGQPLSGNEQRGQPQAPQQTGAFPIQPFVPQGFQGQQPPLSQVFQGISQLPQYNNCPPPQAAVQQ

WO 03/106634 PCT/US03/18666

SEQ ID 10

SEQ ID 11

SEQ ID 12

SEQ ID 13

MEILHCLGPDNQESTVQPMITSIPLNLWGRDLLQQWGAEITMPAPLYSPTSQKIMTKMGYIPGKGLGKNEDGIKVPVEAKINQEREGIGYPF

SEQ ID 14

WATIVGKRAKGPASGPTTNWGIPNSAICSSGFSGTTTPTVPSVSGNKPVTTIQQLSPATSGSAAVDLCTIQAVSLLPGEPPQKTPTGVYGPLPKGTV GLILGRSSLNLKGVQIHTSVVDSDYKGEIQLVISSSIPWSASPRDRIAQLLLLPYIKGGNSEIKRIGGLGSTDPTGKAAYWASQVSENRPVCKAIIQ GKQFEGLVDTGADVSIIALNQWPKNWPKQKAVTGLVGIGTASEVYQSTEILHCLGPDNQESTVQPMITSIPLNLWGRDLLQQWGAEITMPAPSYSPT SOKIMTKMGYIPGKGLGKNEDGIKIPVEAKINQEREGIGNPC

SEQ ID 15

ATACCATTAACTTGGAAAACAGAAAAACCAGTGTGGGTAAATCAGTGGCCGCTACCAAAACAAAAACTGGAGGCTTTACATTTATTAGCAAATGAAC AGTTAGAAAAGGGTCATATTGAGCCTTCGTTCTCACCTTGGAATTCTCCTGTGTTTGTAATTCAGAAGAAATCAGGCAAATGGCGTATGTTAACTGA $\tt CTTAAGGGCTGTAAACGCCGTAATTCAACCCATGGGGCCTCTCCAACCCGGGTTGCCCTCTCCGGCCATGATCCCAAAAGATTGGCCTTTAATTATA$ GCAGAGGTTGCCAATGCTGGACTGGCAATAGCATCTGATAAGATCCAAACCTCTACTCCTTTTCATTATTTAGGGATGCAGATAGAAAATAGAAAAA TTAAGCCACAAAAATAGAAATAAGAAAAGACACATTAAAAACACTAAATGATTTTCAAAAATTACTAGGAGATATTAATTGGATTCGGCCAACTCT AGGCATTCCTACTTATGCCATGTCAAATTTGTTCTCTATCTTAAGAGGAGACTCAGACTTAAATAGTAAAAGAATGTTAACCCCAGAGGCAACAAAAAGCTACATTAATCGGTCAGACAAGATTACGAATAATAAAATTATGTGGGAATGACCCAGACAAAATAGTTGTCCCTTTAACCAAGGAACAAGTTAGACAAGCCTTTATCAATTCTGGTGCATGGAAGATTGGTCTTGCTAATTTTGTGGGAATTATTGATAATCATTACCCAAAAACAAAGATCTTCCAGTTCT TAAAATTGACTACTTGGATTCTACCTAAAATTACCAGACGTGAACCTTTAGAAAATGCTCTAACAGTATTTACTGATGGTTCCAGCAATGGAAAAGC GACCAACCTATCAATATTATATCAGATTCTGCATATGTAGTACAGGCTACAAGGGATGTTGAGACAGCTCTAATTAAATATAGCATGGATGATCAGT TAAACCAGCTATTCAATTTATTACAACAAACTGTAAGAAAAAGAAATTTCCCATTTTATATTACACATATTCGAGCACACACTAATTTACCAGGGCC ${\tt TTTGACTAAAGCAAATGAACAAGCTGACTTACTGGTATCATCTGCACTCATAAAAAGCACAAGAACTTCATGCTTTGACTCATGTAAATGCAGCAGGA$ ${\tt TTAAAAAAACAAATTTGATGTCACATGGAAACAGGCAAAAGATATTGTACAACATTGCACCCAGTGTCAAGTCTTACACCTGCCCACTCAAGAGGCAG$ GAGTTAATCCCAGAGGTCTGTGTCCTAATGCATTATGGCAAATGGATGTCACGCATGTACCTTCATTTGGAAGATTATCATATGTTCACGTAACAGT

SEQ ID 16

 $\textbf{ATGTTAACTGACTTAAGGGCTGTAAACGCCGTAATTCAACCCATGGGGCCTCTCCAACCCGGGTTGCCCTCTCCGGCCATGATCCCAAAAGATTGGC$ TAAAGAACCAGCCACCAGGTTTCAGTGGAAAGTGTTACCTCAGGGAATGCTTAATAGTCCAACTATTTGTCAGACTTTTGTAGGTCGAGCTCTTCAA CATTTCTGCAAGCAGAGGTTGCCAATGCTGGACTGGCAATAGCATCTGATAAGATCCAAACCTCTACTCCTTTTCATTATTTAGGGATGCAGATAGA AAATAGAAAAATTAAGCCACAAAAAATAGAAATAAGAAAAGACACATTAAAAACACTAAATGATTTTCAAAAAATTACTAGGAGATATTAATTGGATT CGGCCAACTCTAGGCATTCCTACTTATGCCATGTCAAATTTGTTCTCTATCTTAAGAGGAGACTCAGACTTAAATAGTAAAAGAATGTTAACCCCAG TTGGATCAAATAGCTACATTAATCGGTCAGACAAGATTACGAATAATAAAATTATGTGGGAATGACCCAGACAAAATAGTTGTCCCTTTAACCAAGG AACAAGTTAGACAAGCCTTTATCAATTCTGGTGCATGGAAGATTGGTCTTGCTAATTTTGTGGGAATTATTGATAATCATTACCCAAAAACAAAGAT $\tt CTTCCAGTTCTTAAAATTGACTACTTGGATTCTACCTAAAATTACCAGACGTGAACCTTTAGAAAATGCTCTAACAGTATTTACTGATGGTTCCAGC$ TACAAGATTTTGACCAACCTATCAATATTATATCAGATTCTGCATATGTAGTACAGGCTACAAGGGATGTTGAGACAGCTCTAATTAAATATAGCAT GGATGATCAGTTAAACCAGCTATTCAATTTATTACAACAAACTGTAAGAAAAAGAAATTTCCCATTTTATATTACACATATTCGAGCACACACTAAT TTACCAGGGCCTTTGACTAAAGCAAATGAACAAGCTGACTTACTGGTATCATCTGCACTCATAAAAGCACAAGAACTTCATGCTTTGACTCATGTAA ATGCAGCAGGATTAAAAAACAAATTTGATGTCACATGGAAACAGGCAAAAGGATATTGTACAACATTGCACCCAGTGTCAAGTCTTACACCTGCCCAC ${\tt TCAAGAGGCAGGAGTTAATCCCAGAGGTCTGTGTCCTAATGCATTATGGCAAATGGATGTCACGCATGTACCTTCATTTGGAAGATTATCATATGTT$ ${\tt CACGTAACAGTTGATACTTATTCACATTTCATATGGGCAACTTGCCAAACAGGAGAAAGTACTTCCCATGTTAAAAAAACATTTATTGTCTTGTTTTG}\\$ $\tt CTGTAATGGGAGTTCCAGAAAAAATCAAAACTGACAATGGACCAGGATATTGTAGTAAAGCTTTCCAAAAATTCTTAAGTCAGTGGAAAATTTCACA$ TACAACAGGAATTCCTTATAATTCCCAAGGACAGGCCATAGTTGAAAGAACTAATAGAACACTCAAAACTCAATTAGTTAAACAAAAAGAAGGGGGA ${\tt GACAGTAAGGAGTGTACCACTCCTCAGATGCAACTTAATCTAGCACTCTATACTTTAAATTTTTTAAACATTTATAGAAATCAGACTACTACTTCTG}$ ${\tt CAGAACAACATCTTACTGGTAAAAAGAACAGCCCACATGAAGGAAAACTAATTTGGTGGAAAGATAGTAAAAATAAGACATGGGAAATAGGGAAGGT}$ ${\tt GATAACGTGGGGGAGAGGTTTTGCTTGTGTTTCACCAGGAGAAAATCAGCTTCCTGTTTGGATACCCACTAGACATTTGAAGTTCTACAATGAACCC}$ ATCAGAGATGCAAAGAAAAGCACCTCCGCGGAGACGGAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAATGGTGACGTCAGAAGAA ${\tt CAGATGAAGTTGCCATCCACCAAGAAGGCAGAGCCGCCAACTTGGGCACAACTAAAGAAGCTGACGCAGTTAGCTACAAAATATCTAGAGAACACAA}$ AGGTGACACAAACCCCAGAGAGTATGCTGCTTGCAGCCTTGATGATTGTATCAATGGTGGTAAGTCTCCCTATGCCTGCAGGAGCAGCTGCAGCTAA

SEQ ID 17

TTAAGAGCCATTAATGCCATAATTCAACCCATGGGGGCTCTCCCATCCCGGTTGCCCTCTCCAGCCATGGTCCCCTTTAATTATAATTGATCTGAAG GATTGCTTTTTTACCATTCCTCTGGCAAAAGAGGATTTTGAAAAATTTGCTTTTACTATACCAGCCTAAATAATAAAGAACCAGCCACCAGGTTTCA $\tt GTGGAAAGTATTGCCTCAGGGAATGCTTAATAATTCAACTATTTGTCAGACTTTCATAGCTCAAGCTCTGCAACCAGTTAGAGACAAGTTTTCAGAC$ GGGACTGACAATAGCATCTGATAAGATTCAAACCTCTCCTCTCTTTCCATTACTTGGGAATGCAGGTAGAGGAAAAGGAAAATTAAACCACAAAAAAATA GAAATAAGAAAAGACACATTAAAAACATTAAATGAGTTTCAAAAGTTGGTAGGAGATACTAATTGGATTCGGAGATATTAATTGGATTTGGCCCAACT ${\tt CTAGGCATTCCTACTTATGCCATGTCAATTTTGTTCTCTTTATAGAGGGGGACTTGGAATTAAATAGTGAAAGAATGTTACCTCCAGAGGCAACTA}$ AAGAAATTAAATTAAATTAAATTTGAAAAAAAATTCGGTCAGCACAAGTAAATAGGATCACTTGGCCCCACTCCAAATTTTGATTTTTGGTACTGCACATTC GCTACATTAATTGGTCAGGGAAGATTACGAATAATAACATTGTGTGGAAATGACCCAGATAAAATCACTGTTCCTTTCAACAAGCAACAAGTTAGAC AAGCCTTTATCAGTTCTGGTGCATGGCAGATTGGTCTTGCTAATTTTCTGGGAATTATTGATAATCATTACCCAAAAACAAAAATCTTCCAGTTCTT AAAATTGACTACTTGGATTCTACCTAAAATTACCAGACGTGAACCTTTAGAAAATGCTCTAACAGTATTTACTGATGGTTCCAGCAATGGAAAAGCG ACCAACCTATCAATATTATATCAGATTCTGCATATGTAGTACAGGCTACAAGGGATGTTGAGACAGCTCTAATTAAATATAGCACGGACGATCATTTAAACCAGCTATTCAATTTATTACAACAAACTGTAAGAAAAAGAAATTTCCCATTTTATATTACTCATATTCGAGCACACACTAATTTACCAGGGCCT TTGACTAAAGCAAATGAACAAGCTGACTTACTGGTATCATCTGCATTCATAAAAGCACAAGAACTTCTTGCTTTGACTCATGTAAATGCAGCAGGAT

SEQ ID 18

ATGGGGCCTCTCCAACCCGGGTTGCCCTCTCCGGCCATGATCCCAAAAGATTGGCCTTTAATTATAATTGATCTAAAGGATTGCTTTTTTACCATCC GGGAATGCTTAATAGTCCAACTATTTGTCAGACTTTTGTAGGTCGAGCTCTTCAACCAGTGAGAAAAGTTTTCAGACTGTTATATTCATTAT CATCCGATAAGATCCAAACCTCTACTCCTTTTCATTATTTAGGGATGCAGATAGAAAATAGAAAATTAAGCCACAAAAAATAGAAATAAGAAAAGA ${\tt CACATTAAAAACACTAAATGATTTCAAAAATTACTAGGAGATATTAATTGGATTCGGCCAACTCTAGGCATTCCTACTTATGCCATGTCAAATTTG}$ TTCTCTATCTTAAGAGGAGACTCAGACTTAAATAGTCAAAGAATATTAACCCCAGAGGCAACAAAAGAAATTAAATTAGTGGAAGAAAAAATTCAGT ${\tt CAGCGCAAATAAATAGAATAGATCCCTTAGCCCCACTCCAACTTTTGATTTTTGCCACTGCACATTCTCCAACAGGCATCATTATTCAAAATACTGA}$ ${\tt TCTTGTGGAGTGGTCATTCCTTCCTCACAGTACAGTTAAGACTTTTACATTGTACTTGGATCAAATAGCTACATTAATCGGTCAGACAAGATTACGA$ $\tt TTGGTCTTGCTAATTTTGTGGGACTTATTGATAATCATTACCCAAAAACAAAGATCTTCCAGTTCTTAAAATTGACTACTTGGATTCTACCTAAAAT$ TGTAAGAAAAAGAAATTTCCCATTTTATATTACTTATATTCGAGCACACACTAATTTACCAGGGCCTTTGACTAAAGCAAATGAACAAGCTGACTTA CTGGTATCATCTGCACTCATAAAAGCACAAGAACTTCATGCTTTGACTCATGTAAATGCAGCAGGATTAAAAAACAAATTTGATGTCACATGGAAAC AGGCAAAAGATATTGTACAACATTGCACCCAGTGTCAAGTCTTACACCTGCCCACTCAAGAGGCAGGAGTTAATCCCAGAGGTCTGTGTCCTAATGC ATTATGGCAAATGGATGTCACGCATGTACCTTCATTTGGAAGATTATCATATGTTCATGTAACAGTTGATACTTATTCACATTTCATATGGGCAACT TGCCAAACAGGAGAAAGTACTTCCCATGTTAAAAAACATTTATTGTCTTGTTTTGCTGTAATGGGAGTTCCAGAAAAAAATCAAAACTGACAATGGAC CAGGATATTGTAGTAAAGCTTTCCAAAAATTCTTAAGTCAGTGGAAAATTTCACATACAACAGGAATTCCTTATAATTCCCAAGGACAGGCCATAGT TGAAAGAACTAATAGAACACTCAAAAACTCAATTAGTTAAACAAAAAGAAGGGGGAGACAGTAAGGAGTGTACCACTCCTCAGATGCAACTTAATCTA GCACTCTATACTTTAAATTTTTTAAACATTTATAGAAATCAGACTACTACTTCTGCAGAACAACATCTTACTGGTAAAAAGAACAGCCCACATGAAG GAAAACTAATTTGGTGGAAAGATAATAAAAATAAGACATGGGAAATAGGGAAGGTGATAACGTGGGGGAGAGGTTTTGCTTGTGTTTCACCAGGAGA AAATCAGCTTCCTGTTTGGTTACCCACTAGACATTTGAAGTTCTACAATGAACCCATCGGAGATGCAAAGAAAAGGGCCTCCACGGAGATGGTAACA CCAGTCACATGGATGGATAATCCTATAGAAGTATATGTTAATGATAGTATATGGTACCTGGCCCCATAGATGATCGCTGCCCTGCCAAACCTGAGG AAGAÁGGGATGATGATAAATATTTCCATTGGGTATCGTTATCCTCCTATTTGCCTAGGGAGGACCAGGATGTTTAATGCCTGCAGTCCAAAATTG GTTGGTAGAAGTACCTACTGTCAGTCCCATCAGTAGATTCACTTATCACATGGTAAGCGGGATGTCACTCAGGCCACGGGTAAATTATTTACAAGAC TTTTCTTATCAAAGATCATTAAAATTTAGACCTAAAGGGAAACCTTGCCCCAAGGAAATTCCCAAAGAATCAAAAAATACAGAAGTTTTAGTTTGGG AAGAATGTGTGGCCAATAGTGCGGTGATATTATAAAACAATGAATTTGGAACTATTATAGATTGGGCACCTCGAGGTCAATTCTACCACAATTGCTC AGGACAAACTCAGTCGTGTCCAAGTGCACAAGTGAGTCCAGCTGTTGATAGCGACTTAACAGAAAGTTTAGACAAACATAAGCATAAAAAAATTGCAG TCTTTCTACCCTTGGGAATGGGGAAAAAAGGAATCTCTACCCCAAGACCAAAAATAGTAAGTCCTGTTTCTGGTCCTGAACATCCAGAATTATGGA ${\tt GGCTTACTGTGGCCTCACACCACATTAGAATTTGGTCTGGAAATCAAACTTTAGAAGAGAGATTGTAAGCCATTTTATACTGTCGACCTAAATTC}$ CAGTCTAACAGTTCCTTTACAAAGTTGCGTAAAGCCCCCTTATATGCTAGTTGTAGGAAATATAGTTATTAAACCAGACTCCCAGACTATAACCTGT ${\tt CCATGGACCGACGTGGGAGGCCTCACCATCCGTCCATATTTTGACTGAAGTATTAAAAGGTGTTTTAAATAGATCCAAAAGATTCATTTTTACTTT}$ GATTGGCAAAAGATTCTACAAGATTGTGGAATTCACAATCTAGTATTGATCAAAAATTGGCAAATCAAATTAATGATCTTAGACAAACTGTCATTT GGATGGGAGACAGACTCATGAGCTTAGAACATCGTTTCCAGTTACAATGTGACTGGAATACGTCAGATTTTTGTATTACACCCCAAATTTATAATGA ${\tt GTCTGAGCATCACTGGGACATGGTTAGACGCCATCTACAGGGAAGAGAAGATAATCTCACTTTAGACATTTCCAAATTAAAAGAACAAATTTTCGAA$ ${\tt CCATTGGAAGTACATCGATTATAAATCTCATATTAATCCTTGTGTGCCTGTTTTGTCTGTTGTTAGTCTGCAGGTGTACCCAACAGCTCCGAAGAGA}$ GTGTCTGTGTAG

SEQ ID 19

MLTDLRAVNAVIQPMGPLQPGLPSPAMIPKDWPLIIIDLKDCFFTIPLAEQDCEKFAFTIPAINNKEPATRFQWKVLPQGMLNSPTICQTFVGRALQ
PVREKFSDCYIIHCIDDILCAAETKDKLIDCYTFLQAEVANAGLAIASDKIQTSTPFHYLGMQIENRKIKPQKIEIRKDTLKTLNDFQKLLGDINWI
RPTLGIPTYAMSNLFSILRGDSDLNSKRMLTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPTGIIIQNTDLVEWSFLPHSTVKTFTLY

LDQIATLIGGTRLRIIKLCGNDPDKIVVPLTKEQVRQAFINSGAWKIGLANFVGIIDNHYPKTKIFQFLKLTTWILPKITREPLENALTVFTDGSS
NGKAAYTGPKERVIKTPYQSAQRAELVAVITVLQDFDQPINIISDSAYVVQATRDVETALIKYSMDDQLNQLFNLLQQTVRKRNFPFYITHIRAHTN
LPGPLTKANEQADLLVSSALIKAQELHALTHVNAAGLKNKFDVTWKQAKDIVQHCTQCQVLHLPTQEAGVNPRGLCPNALWQMDVTHVPSFGRLSYV
HVTVDTYSHFIWATCQTGESTSHVKKHLLSCFAVMGVPEKIKTDNGPGYCSKAFQKFLSQWKISHTTGIPYNSQGQAIVERTNRTLKTQLVKQKEGG
DSKECTTPQMQLNLALYTLNFLNIYRNQTTTSAEQHLTGKKNSPHEGKLIWWKDSKNKTWEIGKVITWGRGFACVSPGENQLPVWIPTRHLKFYNEP
IRDAKKSTSAETETSQSSTVDSQDEQNGDVRRTDEVAIHQEGRAANLGTTKEADAVSYKISREHKGDTNPREYAACSLDDCINGGKSPYACRSSCS

SEQ ID 20

MGPLQPGLPSPAMIPKDWPLIIIDLKDCFFTIPLAEQDCEKFAFTIPAINNKEPATRFQWKVLPQGMLNSPTICQTFVGRALQPVREKFSDCYIIHY
IDDILCAAETKDKLIDCYTFLQAEVANAGLAIASDKIQTSTPFHYLGMQIENRKIKPQKIEIRKDTLKTLNDFQKLLGDINWIRPTLGIPTYAMSNL
FSILRGDSDLNSQRILTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPTGIIIQNTDLVEWSFLPHSTVKTFTLYLDQIATLIGQTRLR
ITKLCGNDPDKIVVPLTKEQVRQAFINSGAWQIGLANFVGLIDNHYPKTKIFQFLKLTTWILPKITRREPLENALTVFTDGSSNGKAAYTGPKERVI
KTPYQSAQRDELVAVITVLQDFDQPINIISDSAYVVQATRDVETALIKYSMDDQLNQLFNLLQQTVRKRNFPFYITYIRAHTNLPGPLTKANEQADL
LVSSALIKAQELHALTHVNAAGLKNKFDVTWKQAKDIVQHCTQCQVLHLPTQEAGVNPRGLCPNALWQMDVTHVPSFGRLSYVHVTVDTYSHFIWAT
CQTGESTSHVKKHLLSCFAVMGVPEKIKTDNGPGYCSKAFQKFLSQWKISHTTGIPYNSQGQAIVERTNRTLKTQLVKQKEGGDSKECTTPQMQLNL
ALYTLNFLNIYRNQTTTSAEQHLTGKKNSPHEGKLIWWKDNKNKTWEIGKVITWGRGFACVSPGENQLPVWLPTRHLKFYNEPIGDAKKRASTEMVT
PVTWMDNPIEVYVNDSIWVPGPIDDRCPAKPEEEGMMINISIGYRYPPICLGRAPGCLMPAVQNWLVEVPTVSPISRFTYHMVSGMSLRPRVNYLQD
FSYQRSLKFRPKGKPCPKEIPKESKNTEVLVWEECVANSAVILXNNEFGTIIDWAPRGQFYHNCSGQTQSCPSAQVSPAVDSDLTESLDKHKHKKLQ
SFYPWEWGEKGISTPRPKIVSPVSGPEHPELWRLTVASHHIRIWSGNQTLETRDCKPFYTVDLNSSLTVPLQSCVKPPYMLVVGNIVIKPDSQTITC
ENCRLLTCIDSTFNWQHRILLVRAREGVWIPVSMDRPWEASPSVHILTEVLKGVLNRSKRFIFTLIAVIMGLIAVTATAAVAGVALHSSVQSVNFVN
DWQKNSTRLWNSQSSIDQKLANQINDLRQTVIWMGDRLMSLEHRFQLQCDWNTSDFCITPQIYNESEHHWDMVRRHLQGREDNLTLDISKLKEQIFE
ASKAHLNLVPGTEAIAGVADGLANLNPVTWVKTIGSTSIINLILILVCLFCLLLVCRCTQQLRRDSDHRERAMMTMAVLSKRKGGNVGKSKRDQIVT
VSV

SEQ ID 21

NKSRKRRNESLLGAATVEPPKPIPLTWKTEKPVWVNQWPLPKQKLEALHLLANEQLEKGHIEPSFSPWNSPVFVIQKKSGKWRMLTDLRAVNAVIQ
PMGPLQPGLPSPAMIPKDWPLIIIDLKDCFFTIPLAEQDCEKFAFTIPAINNKEPATRFQWKVLPQGMLNSPTICQTFVGRALQPVREKFSDCYIIH
CIDDILCAAETKDKLIDCYTFLQAEVANAGLAIASDKIQTSTPFHYLGMQIENRKIKPQKIEIRKDTLKTLNDFQKLLGDINWIRPTLGIPTYAMSN
LFSILRGDSDLNSKRMLTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPTGIIIQNTDLVEWSFLPHSTVKTFTLYLDQIATLIGQTRL
RIIKLCGNDPDKIVVPLTKEQVRQAFINSGAWKIGLANFVGIIDNHYPKTKIFQFLKLTTWILPKITRREPLENALTVFTDGSSNGKAAYTGPKERV
IKTPYQSAQRAELVAVITVLQDFDQPINIISDSAYVVQATRDVETALIKYSMDDQLNQLFNLLQQTVRKRNFPFYITHIRAHTNLPGPLTKANEQAD
LLVSSALIKAQELHALTHVNAAGLKNKFDVTWKQAKDIVQHCTQCQVLHLPTQEAGVNPRGLCPNALWQMDVTHVPSFGRLSYVHVTVDTYSHFIWA
TCQTGESTSHVKKHLLSCFAVMGVPEKIKTDNGPGYCSKAFQKFLSQWKISHTTGIPYNSQGQAIVERTNRTLKTQLVKQKEGGDSKECTTPQMQLN
LALYTLNFLNIYRNQTTTSAEQHLTGKKNSPHEGKLIWWKDNKNKTWEIGKVITWGRGFACVSPGENQLPVWIPTRHLKFYNEPIRDAKKSTSAETE
TSQSSTVDSQDEQNGDVRRTDEVAIHQEGRAANLGTTKEADAVSYKISREHKGDTNPREYAACSLDDCINGGKSPYACRSSCS

SEQ ID 22

ATGAACCCATCAGAGATGCAAAGAAAAGCACCTCCGCGGAGACGGAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAATGGTGACGT CAGAAGAACAGATGAAGTTGCCATCCACCAAGAAGGCAGAGCCGCCAACTTGGGCACAACTAAAGAAGCTGACGCAGTTAGCTACAAAATATCTAGA GAACACAAAGGTGACACAAACCCCAGAGAGTATGCTGCTTGCAGCCTTGATGATTGTATCAATGGTGGTAAGTCTCCCTATGCCTGCAGGAGCAGCT $\tt GTGTATGGGTACCTGGCCCATAGATGATCGCTGCCCAAACCTGAGGAAGAAGGGATGATAAATATTTCCATTGGGTATCATTATCCTCC$ ${\tt CACATGGTAAGCGGGATGTCACTCAGGCCACGGGTAAATTATTTACAAGACTTTTCTTATCAAAGATCATTAAAATTTAGACCTAAAGGGAAACCTT}$ $\tt GCCCCAAGGAAATTCCCAAAGAATCAAAAAATACAGAAGTTTTAGTTTGGGAAGAATGTGTGGCCAATAGTGCGGTGATATTACAAAACAATGAATT$ $\tt CGGAACTATTATAGATTGGGCACCTCGAGGTCAATTCTACCACAATTGCTCAGGACAAACTCAGTCGTGTCCAAGTGCACAAGTGAGTCCAGCTGTT$ GATAGCGACTTAACAGAAAGTTTAGACAAACATAAGCATAAAAAAATTGCAGTCTTTCTACCCTTGGGAATGGGGAGAAAAAGGAATCTCTACCCCAA GACCAAAAATAGTAGTCCTGTTTCTGGTCCTGAACATCCAGAATTATGGAGGCTTACTGTGGCCTCACACCACATTAGAATTTGGTCTGGAAATCA AACTTTAGAAACAAGAGATCGTAAGCCATTTTATACTATTGACCTGAATTCCAGTCTAACAGTTCCTTTACAAAGTTGCGTAAAGCCCCCTTATATG $\tt CTAGTTGTAGGAAATATAGTTATTAAACCAGACTCCCAGACTATAACCTGTGAAAATTGTAGATTGCTTACTTGCATTGATTCAACTTTTAATTGGC$ TGAAGTATTAAAAGGTGTTTTAAATAGATCCAAAAGATTCATTTTTACTTTAATTGCAGTGATTATTGCAGTTAATTGCAGTCACAGCTACGGCTGCT GTAGCAGGAGTTGCATTGCACTCTTCTGTTCAGTCAGTAAACTTTGTTAATGATTGGCAAAAAAATTCTACAAGATTGTGGAATTCACAATCTAGTA ATGTGACTGGAATACGTCAGATTTTTGTATTACACCCCAAATTTATAATGAGTCTGAGCATCACTGGGACATGGTTAGACGCCATCTACAGGGAAGA GAAGATAATCTCACTTTAGACATTTCCAAATTAAAAGAACAAATTTTCGAAGCATCAAAAGCCCATTTAAATTTGGTGCCAGGAACTGAGGCAATTG CAGGAGTTGCTGATGGCCTCGCAAATCTTAACCCTGTCACTTGGGTTAAGACCATTGGAAGTACTACGATTATAAATCTCATATTAATCCTTGTGTG CCTGTTTTGTCTGTTGTTAGTCTGCAGGTGTACCCAACAGCTCCGAAGAGACAGCGACCA

SEQ ID 23

ATGCAAAGAAAAGCACCTCCGCGGAGACGGAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAATGGTGACGTCAGAAGAACAGATGA AGTTGCCATCCACCAAGAAGGCAGAGCCGCCAACTTGGGCACAACTAAAGAAGCTGACGCAGTTAGCTACAAAATATCTAGAGAACACAAAGGTGACACAAACCCCAGAGAGTATGCTGCTGCAGCCTTGATGATTGTATCAATGGTGGTAAGTCTCCCTATGCCTGCAGGAGCAGCTGCAGCTAACTATACC GCCCCATAGATGATCGCTGCCCTGCCAAACCTGAGGAAGAAGGGATGATGATAAATATTTCCATTGGGTATCATTATCCTCCTATTTGCCTAGGGAG ATGTCACTCAGGCCACGGGTAAATTATTTACAAGACTTTTCTTATCAAAGATCATTAAAATTTAGACCTAAAGGGAAACCTTGCCCCAAGGAAATTC CCAAAGAATCAAAAAATACAGAAGTTTTAGTTTGGGAAGAATGTGTGGCCAATAGTGCGGTGATATTACAAAACAATGAATTCGGAACTATTATAGA ${\tt TTGGGCACCTCGAGGTCAATTCTACCACAATTGCTCAGGACAAACTCAGTCGTGTCAAAGTGCACAAGTGAGTCCAGCTGTTGATAGCGACTTAACA$ GAAAGTTTAGACAAACATAAGCATAAAAAATTGCAGTCTTTCTACCCTTGGGAATGGGGAGAAAAAGGAATCTCTACCCCAAGACCAAAAATAGTAA AGATCGTAAGCCATTTTATACTATTGACCTGAATTCCAGTCTAACAGTTCCTTTACAAAGTTGCGTAAAGCCCCCTTATATGCTAGTTGTAGGAAAT ATAGTTATTAAACCAGACTCCCAGACTATAACCTGTGAAAATTGTAGATTGCTTACTTGCATTGATTCAACTTTTAATTGGCAACACCGTATTCTGC TGTTTTAAATAGATCCAAAAGATTCATTTTTACTTTAATTGCAGTGATTATGGGATTAATTGCAGTCACAGCTACGGCTGCTGTAGCAGGAGTTGCA ${\tt TTGCACTCTTCTGTTCAGTCAGTAAACTTTGTTAATGATTGGCAAAAAAATTCTACAAGATTGTGGAATTCACAATCTAGTATTGATCAAAAATTGG}$ ${\tt GTCAGATTTTGTATTACACCCCAAATTTATAATGAGTCTGAGCATCACTGGGACATGGTTAGACGCCATCTACAGGGAAGAAGATAATCTCACT}$ ${\tt GCCTCGCAAATCTTAACCCTGTCACTTGGGTTAAGACCATTGGAAGTACTACGATTATAAATCTCATATTAATCCTTGTGTGCCTGTTTTGTCTGTT$ $\tt GTTAGTCTGCAGGTGTACCCAACAGCTCCGAAGAGACAGCGACCATCGAGAACGGGCCATGATGACGATGGCGGTTTTGTCGAAAAGAAAAGGAAAAGGGGGA$

SEQ ID 24

GTCACATGGATGGATAATCCTATAGAAGTATATGTTAATGATAGTGTATGGGTACCTGGCCCCACAGATGATCGCTGCCCAAACCTGAGGAAG AAGGGATGATAAATATTTCCATTGTGTATCGTTATCCTCTATTTGCCTAGGGAGGACCACCAGGATGTTTAATGCCTGCAGTCCAAAATTGGTT ${\tt GGTAGAAGTACCTACTGTCAGTCCTAACAGTAGATTCACTTATCACATGGTAAGCGGGATGTCACTCAGGCCACGGGTAAATTATTTACAAGACTTT}$ TCTTATCAAAGATCATTAAAATTTAGACCTAAAGGGAAACCTTGCCCCAAGGAAATTCCCAAAGAATCAAAAAAATTACAGAAGTTTTAGTTTTGGGAAG AATGTGTGGCCAATAGTGCGGTGATATTACAAAACAATGAATTCGGAACTATTATAGATTGGGCACCTCGAGGTCAATTCTACCACAATTGCTCAGG ACAAACTCAGTCGTGTCCAAGTGCACAAGTGAGTCCAGCTGTTGATAGCGACTTAACAGAAAGTCTAGACAAACATAAGCATAAAAAATTACAGTCT TTCTACCCTTGGGAATGGGGAAAAAGGAATCTCTACCCCAAGACCAGAAATAATAAGTCCTGTTTCTGGTCCTGAACATCCAGAATTATGGAGGC ACGGTTCCTTTACAAAGTTGCGTAAAGCCCTCTTATATGCTAGTTGTAGGAAATATAGTTATTAAACCAGACTCCCAAACTATAACCTGTGAAAATTGTAGATTGTTTACTTGCATTGATTCAACTTTTAATTGGCGGCACCGTATTCTGCTGGTGAGAGCAAGAGAGGGCGTGTGGATCTCTGTGTCCGTGGA $\tt CTGACCGTGGGAGGCCTCGCCATCCATATTTTGACTGAAGTATTAAAAGACATTTTAAATAGATCCAAAAGATTCATTTTTACCTTAATTGCA$ $\tt GTGATTATGGGATTAATTGCAGTCACAGCTACGGCTGCTGTGGCAGGAGTTGCATTGCACTCTTCTGTTCAGTCGGTAAACTTTGTTAATGATTGGC$ AAAAGAATTCTACAAGATTGTGGAATTCACAATCTAGTATTGATCAAAAATTGGCAAATCAAATTAATGATCTTAGACAAACTGTCATTTGGATGGG AGACAGACTCATGAGCTTAGAACATTGTTTCCAGTTACAGTGTGACTGGAATACGTCAGATTTTTGTATTACACCCCAAATTTATAATGAGTCTGAG ${\tt AAGCCCATTTAAATTTGATGCCAGGAACTGAGGCAATTGCAGGAGTTGCTGATGGCCTCGCAAATCTTAACCCTGTCACTTGGGTTAAGACCATCGG}$ AAGTACTATGATTATAAATCTCATATTAATCCTTGTGTGCCTGTTTTGTCTGTTGTTAGTCTGCAGGTGTACCCAACAGCTCCGAAGAGACAGCGAC CATCGAGAACGGGCCA

SEQ ID 25

TGTAAGAAAAAGAAATTTCCCATTTTATATTACTTATATTCGAGCACACACTAATTTACCAGGGCCTTTGACTAAAGCAAATGAACAAGCTGACTTA $\tt CTGGTATCATCTGCACTCATAAAAGCACAAGAACTTCATGCTTTGACTCATGTAAATGCAGGAGGATTAAAAAAACAAATTTGATGTCACATGGAAAC$ AGGCAAAAGATATTGTACAACATTGCACCCAGTGTCAAGTCTTACACCTGCCCACTCAAGAGGCAGGAGTTAATCCCAGAGGTCTGTGTCCTAATGCATTATGGCAAATGGATGTCACGCATGTACCTTCATTTGGAAGATTATCATATGTTCATGTAACAGTTGATACTTATTCACATTTCATATGGGCAACT $\tt TGCCAAACAGGAGAAAGTACTTCCCATGTTAAAAAAACATTTATTGTCTTGTTTTGCTGTAATGGGAGTTCCAGAAAAAATCAAAACTGACAATGGAC$ CAGGATATTGTAGTAAAGCTTTCCAAAAATTCTTAAGTCAGTGGAAAATTTCACATACAACAGGAATTCCTTATAATTCCCAAGGACAGGCCATAGT TGAAAGAACTAATAGAACACTCAAAACTCAATTAGTTAAACAAAAAGAAGGGGGGAGACAGTAAGGAGTGTACCACTCCTCAGATGCAACTTAATCTA ${\tt GCACTCTATACTTTAAATTTTTTAAACATTTATAGAAATCAGACTACTACTTCTGCAGAACAACATCTTACTGGTAAAAAGAACAGCCCACATGAAG$ GAAAACTAATTTGGTGGAAAGATAATAAAAATAAGACATGGGAAATAGGGAAGGTGATAACGTGGGGGAGAGGTTTTGCTTGTGTTTCACCAGGAGA AAATCAGCTTCCTGTTTGGTTACCCACTAGACATTTGAAGTTCTACAATGAACCCATCGGAGATGCAAAGAAAAGGGCCTCCACGGAGATGGTAACA AAGAAGGGATGATAAATATTTCCATTGGGTATCGTTATCCTCCTATTTGCCTAGGGAGGACCAGGATGTTTAATGCCTGCAGTCCAAAATTG $\tt GTTGGTAGAAGTACCTACTGTCAGTCCCATCAGTAGATTCACTTATCACATGGTAAGCGGGATGTCACTCAGGCCACGGGTAAATTATTTACAAGAC$ TTTTCTTATCAAAGATCATTAAAATTTAGACCTAAAGGGAAACCTTGCCCCAAGGAAATTCCCAAAGAATCAAAAAATACAGAAGTTTTTAGTTTGGG AAGAATGTGTGGCCAATAGTGCGGTGATATTATAAAACAATGAATTTGGAACTATTATAGATTGGGCACCTCGAGGTCAATTCTACCACAATTGCTC AGGACAAACTCAGTCGTGTCCAAGTGCACAAGTGAGTCCAGCTGTTGATAGCGACTTAACAGAAAGTTTAGACAAACATAAGCATAAAAAATTGCAGTCTTTCTACCCTTGGGAATGGGGAGAAAAAGGAATCTCTACCCCAAGACCAAAAATAGTAAGTCCTGTTTCTGGTCCTGAACATCCAGAATTATGGA ${\tt GGCTTACTGTGGCCTCACACCACATTAGAATTTGGTCTGGAAATCAAACTTTAGAAACAAGAGATTGTAAGCCATTTTATACTGTCGACCTAAATTC}$ CAGTCTAACAGTTCCTTTACAAAGTTGCGTAAAGCCCCCTTATATGCTAGTTGTAGGAAATATAGTTATTAAACCAGACTCCCAGACTATAACCTGT CCATGGACCGACCGTGGGAGGCCTCACCATCCGTCCATATTTTGACTGAAGTATTAAAAGGTGTTTTAAATAGATCCAAAAGATTCATTTTTACTTT GATTGGCAAAAGAATTCTACAAGATTGTGGAATTCACAATCTAGTATTGATCAAAAATTGGCAAATCAAATTAATGATCTTAGACAAACTGTCATTT GGATGGGAGACAGACTCATGAGCTTAGAACATCGTTTCCAGTTACAATGTGACTGGAATACGTCAGATTTTTGTATTACACCCCCAAATTTATAATGA GTCTGAGCATCACTGGGACATGGTTAGACGCCATCTACAGGGAAGAGAAGATAATCTCACTTTAGACATTTCCAAATTAAAAGAACAAATTTCGAA ${\tt CCATTGGAAGTACATCGATTATAAATCTCATATTAATCCTTGTGTGCCTGTTTTTGTCTGTTGTTAGTCTGCAGGTGTACCCAACAGCTCCGAAGAGAA}$ ${\tt CAGCGACCATCGAGAACGGGCCATGATGACGATGGCGGTTTTGTCGAAAAGAAAAGGGGGAAAATGTGGGGAAAAGCAAGAGAGATCAAATTGTTACT}$ GTGTCTGTGTAG

SEQ ID 26

MQRKAPPRRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTQTPESMLLAALMIVSMVVSLPMPAGAAAANYT
YWAYVPFPPLIRAVTWMDNPTEVYVNDSVWVPGPIDDRCPAKPEEEGMMINISIGYHYPPICLGRAPGCLMPAVQNWLVEVPTVSPICRFTYHMVSG
MSLRPRVNYLQDFSYQRSLKFRPKGKPCPKEIPKESKNTEVLVWEECVANSAVILQNNEFGTIIDWAPRGQFYHNCSGQTQSCQSAQVSPAVDSDLT
ESLDKHKKKLQSFYPWEWGEKGISTPRPKIVSPVSGPEHPELWRLTVASHHIRIWSGNQTLETRDRKPFYTIDLNSSLTVPLQSCVKPPYMLVVGN
IVIKPDSQTITCENCRLLTCIDSTFNWQHRILLVRAREGVWIPVSMDRPWEASPSVHILTEVLKGVLNRSKRFIFTLIAVIMGLIAVTATAAVAGVA
LHSSVQSVNFVNDWQKNSTRLWNSQSSIDQKLANQINDLRQTVIWMGDRLMSLEHRFQLQCDWNTSDFCITPQIYNESEHHWDMVRRHLQGREDNLT
LDISKLKEQIFEASKAHLNLVPGTEAIAGVADGLANLNPVTWVKTIGSTTIINLILILVCLFCLLLVCRCTQQLRRDSDHRERAMMTMAVLSKRKGG
NVGKSKRDQIVTVSV

SEQ ID 27

MGPLQPGLPSPAMIPKDWPLIIIDLKDCFFTIPLAEQDCEKFAFTIPAINNKEPATRFQWKVLPQGMLNSPTICQTFVGRALQPVREKFSDCYIIHY
IDDILCAAETKDKLIDCYTFLQAEVANAGLAIASDKIQTSTPFHYLGMQIENRKIKPQKIEIRKDTLKTLNDFQKLLGDINWIRPTLGIPTYAMSNL
FSILRGDSDLNSQRILTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPTGIIIQNTDLVEWSFLPHSTVKTFTLYLDQIATLIGQTRLR
ITKLCGNDPDKIVVPLTKEQVRQAFINSGAWQIGLANFVGLIDNHYPKTKIFQFLKLTTWILPKITRREPLENALTVFTDGSSNGKAAYTGPKERVI
KTPYQSAQRDELVAVITVLQDFDQPINIISDSAYVVQATRDVETALIKYSMDDQLNQLFNLLQQTVRKRNFPFYITYIRAHTNLPGPLTKANEQADL
LVSSALIKAQELHALTHVNAAGLKNKFDVTWKQAKDIVQHCTQCQVLHLPTQEAGVNPRGLCPNALWQMDVTHVPSFGRLSYVHVTVDTYSHFIWAT
CQTGESTSHVKKHLLSCFAVMGVPEKIKTDNGPGYCSKAFQKFLSQWKISHTTGIPYNSQGQAIVERTNRTLKTQLVKQKEGGDSKECTTPQMQLNL
ALYTLNFLNIYRNQTTTSAEQHLTGKKNSPHEGKLIWWKDNKNKTWEIGKVITWGRGFACVSPGENQLPVWLPTRHLKFYNEPIGDAKKRASTEMVT
PVTWMDNPIEVYVNDSIWVPGPIDDRCPAKPEEEGMMINISIGYRYPPICLGRAPGCLMPAVQNWLVEVPTVSPISRFTYHMVSGMSLRPRVNYLQD
FSYQRSLKFRPKGKPCPKEIPKESKNTEVLVWEECVANSAVILXNNEFGTIIDWAPRGQFYHNCSGQTQSCPSAQVSPAVDSDLTESLDKHKHKKLQ
SFYPWEWGEKGISTPRPKIVSPVSGPEHPELWRLTVASHHIRIWSGNQTLETRDCKPFYTVDLNSSLTVPLQSCVKPPYMLVVGNIVIKPDSQTITC
ENCRLLTCIDSTFNWQHRILLVRAREGVWIPVSMDRPWEASPSVHILTEVLKGVLNRSKRFIFTLIAVIMGLIAVTATAAVAGVALHSSVQSVNFVN
DWQKNSTRLWNSQSSIDQKLANQINDLRQTVIWMGDRLMSLEHRFQLQCDWNTSDFCITPQIYNESEHHWDMVRRHLQGREDNLTLDISKLKEQIFE
ASKAHLNLVPGTEAIAGVADGLANLNPVTWVKTIGSTSIINLILILVCLFCLLLVCRCTQQLRRDSDHRERAMMTMAVLSKRKGGNVGKSKRDQIVT

SEQ ID 28

MNPSEMQRKAPPRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTQTPESMLLAALMIVSMVVSLPMPAGAA
AANYTYWAYVPFPPLIRAVTWMDNPTEVYVNDSVWVPGPIDDRCPAKPEEEGMMINISIGYHYPPICLGRAPGCLMPAVQNWLVEVPTVSPICRFTY

HMVSGMSLRPRVNYLQDFSYQRSLKFRPKGKPCPKEIPKESKNTEVLVWEECVANSAVILQNNEFGTIIDWAPRGQFYHNCSGQTQSCPSAQVSPAV DSDLTESLDKHKHKKLQSFYPWEWGEKGISTPRPKIVSPVSGPEHPELWRLTVASHHIRIWSGNQTLETRDRKPFYTIDLNSSLTVPLQSCVKPPYM LVVGNIVIKPDSQTITCENCRLLTCIDSTFNWQHRILLVRAREGVWIPVSMDRPWEASPSVHILTEVLKGVLNRSKRFIFTLIAVIMGLIAVTATAA VAGVALHSSVQSVNFVNDWQKNSTRLWNSQSSIDQKLANQINDLRQTVIWMGDRLMSLEHRFQLQCDWNTSDFCITPQIYNESEHHWDMVRRHLQGR EDNLTLDISKLKEQIFEASKAHLNLVPGTEAIAGVADGLANLNPVTWVKTIGSTTIINLILLILVCLFCLLLVCRCTQQLRRDSDHRERAMMTMAVLS KRKGGNVGKSKRDQIVTVSV

SEQ ID 29

AGTTCTACAATGAACCCATCAGAGATGCAAAGAAAAGCACCTCCGCGGAGACGGAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAA TGGTGACGTCAGAAGAACAGATGAACTCACCAAGAAGGCAGACCCGCCAACTTGGGCACAACTAAAGAAGCTGACGCAGTTAGCTACAAA ATATCTAGAGAACACAAAGGTGACACAAAACCCCAGAGAGTATGCTGCTTGCAGCCTTGATGATTGTATCAATGGTGGTAAGTCTCCCTATGCCTGCA GGA

SEQ ID 30

TCTGCAGGTGTACCCAACAGCTCCGAAGAGACAGCGACCATCGAGAACGGGCCATGA

SEQ ID 31

 ${\tt MNPSEMQRKAPPRRRRRRRAPLTHKMNKMVTSEEQMKLPSTKKAGPPTWAQLKKLTQLATKYLENTKVTQTPESMLLAALMIVSMVSAGVPNSSEE\\ {\tt TATIENGP}$

SEQ ID 32

 ${\tt MNPSEMQRKAPPRRRRRRRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKSAGVPNSSEETATIENGP}$

SEQ ID 33

MNPSEMORKGPPORCLOVYPTAPKRORPSRTGHDDDGGFVEKKRGKCGEKOERSDCYCVCVERSRHRRLHFVLY

SEQ ID 34

MNSLEMQRKVWRWRHPNRLASLQVYPAAPKRQQPARMGHSDDGGFVKKKRGGYVRKREIRLSLCLCRKGRHKKLHFVLY

SEQ ID 35

 ${\tt MNPSEMQRKAPPRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVILQVYPTAPKRQRPSRTGHDDDGGFVEK\\ KRGKCGEKQERSDCYCVCVERSRHRRLHFVLY$

SEO ID 36

MNPSEMQRKAPPRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVYPTAPKRQRPSRTGHDDDGGFVEKKRGK CGEKQERSDCYCVCVERSRHRRLHFVLY

SEQ ID 37

 ${\tt MNPSEMQRKAPPRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTQTPESMLLAALMIVSMVVYPTAPKRQRPSRTGHDDDGGFVEKKRGKCGEKQERSDCYCVCVERSRHRRLHFVLY$

SEQ ID 38

 ${\tt MNPSEMQRKGPPQRCLQVYPTAPKRQRPSRTGHDDDGGFVEKKRGKCGEKQERSDCYCVCVERSRHRRLHFVLY}$

SEQ ID 39

MNPSEMQRKGPPQRCLQVYPTAPKRQRPSRTGHDDDGGFVEKKRGKCGEKQERSDCYCVCVERSRHRRLHFVLY

SEQ ID 40

MEYKNRHLKFYNEPIGDAKKRASTEMSAGVPNSSEETATIENGP

SEQ ID 41

MNPSEMQRKGPPQRCLQVYPTAPKRQRPSRTGHDDDGGFVEKKRGKCGEKQERSDCYCVCVERSRHRRLHFVLY

SEQ ID 42

MNPSEMORKAPPRRRHRNRAPLTHKMNKMVTSEEOMKLPSTKKAEPPTWAOLKKLTOLATKYLENTKSAGVPNSSEETATIENGP

SEQ ID 43

 $\verb|MNPSEMQRKAPPRRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTQTPESMLLAALMIVSMVSAGVPNSSEE TATIENGP|$

SEQ ID 44

MVTPVTWMDNPIEVYVNDSVWVPGPTDDRCPAKPEEEGMMINISIVYRYPPICLGRAPGCLMPAVQNCLQVYPTAPKRQRPSRTGHDDDGGFVEKKR GKCGEKOERSDCYCVCVERSRHRRLHFVLY

SEQ ID 45

 ${\tt MVTPVTWMDNPIEVYVNDSEWVPGPTDDRCPAKPEEEGMMINISIGLQVYPTAPKRQRPSRTGHDDDGGFVEKKRGKCGEKQERSDCYCVCVERSRHRLHFVMC$

SEQ ID 46

 $\verb|MNSLEMQRKVWRWRHPNRLASLQVYPA| APKRQQPARMGHSDDGGFVKKKRGGYVRKREIRLSLCLCRKGRHKKLHFDLY|$

SEQ ID 47

MNSLEMQRKAPPRRRHRNRAPLTHKMNKMVTSEEQMKLSSTKKAEPPTWAQLKKLTQLATKYLENTKVTQTPESMLLAALMIVSMVVSLPMPAGAA
AANYTYWAYVPFPPLIRAVTWMDNPTEVYVNDSVWVPGPIDDRCPAKPEEEGMMINISIGYHYPPICLGRAPGCLMPAVQNWLVEVPTVSPICRFTY
HMSAGVPNSSEETATIENGP

SEQ ID 48

 ${\tt MNPSEMQRKAPPRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTLQVYPTAPKRQRPSRTGHDDDGGFVEKKRGKCGEKQERSDCYCVCVERSRHRRLHFVMY}$

SEQ ID 49

 ${\tt MNPSEMQRKAPPRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVYPTAPKRQRPSRTGHDDDGGFVEKKRGK\\ {\tt CGEKQERSDCYCVCVERSRHRRLHFVMY}$

SEQ ID 50

MNPSEMQRKAPPRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYXLENTKVTQTPESMLLAALMIVSMVVYPTAPKRQ RPSRTGHDDDGGFVEKKRGKCGEKQERSDCYCVCVERSRHRRLHFVMY

SEQ ID 5

GCCGCGGAATTTCGACTCTAGGCCATTGCATACGTTGTATCTATATCATAATATGTACATTTATATTGGCTCATGTCCAATATGACCGCCATGTTGA CATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAACTTACGGTAAATG GCCCGCCTGGCTGACCGCCCAACGACCCCCCCCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCA ATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTCCGCCCCCTATTGACGTCAATGACGGTAAATGG $\tt CCCGCCTGGCATTATGCCCAGTACATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGT$ AAATCAACGGGACTTTCCAAAATGTCGTAATAACCCCGCCCCGTTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCT GTTTTTGGCTTGGGGCCTATACACCCCCGCTTCCTTATGCTATAGGTGATGGTATAGCTTAGCCTATAGGTGTGGGTTATTGACCATTATTGACCAC TCCCCTATTGGTGACGATACTTTCCATTACTAATCCATAACATGGCTCTTTGCCACAACTATCTCTATTGGCTATATGCCAATACTCTGTCCTTCAG AGACTGACACGGACTCTGTATTTTTACAGGATGGGGTCCCATTTATTATTACAAATTCACATATACAACAACGCCGTCCCCCGTGCCCGCAGTTTT TATTAAACATAGCGTGGGATCTCCACGCGAATCTCGGGTACGTGTTCCGGACATGGGCTCTTCTCCGGTAGCGGCGGAGCTTCCACATCCGAGCCCT TGTGCCGCACAAGGCCGTGGCGGTAGGGTATGTGTCTGAAAATGAGCTCGGAGATTGGGCTCGCACCGCTGACGCAGATGGAAGACTTAAGGCAGCG GCAGAAGAAGATGCAGGCAGCTGAGTTGTTGTATTCTGATAAGAGTCAGAGGTAACTCCCGTTGCGGTGCTGTTAACGGTGGAGGGCAGTGTAGTCT GAGCAGTACTCGTTGCTGCCGCCGCCGCCACCAGACATAATAGCTGACAGACTAACAGACTGTTCCTTTCCATGGGTCTTTTCTGCAGTCACCGTCG qatqqtqaccaqcqaqqaqcaqatqaaqctqcccaqcaccaagaaggccgagccccccacctgggcccagctgaagaagctgacccagctggccacc aaqtacctqqaqaacaccaaqqtqacccaqacccccgaqaqcatgctgctggccgccctgatgatcgtgagcatggtgagcgccggcgtgcccaaca $\tt gcagcgaggagaccgccaccatcgagaacggccccgcttaaagaattcAGACTCGAGCAAGTCTAGAAAGCCATGGATATCGGATCCACTACGCGTT$ $\tt CCACTGTCCTTTCCTAATAAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTCATTCTATTCTGGGGGGTGGGGTGGGGCAGGACAGCAAGGG$ GGAGGATTGGGAAGACAATAGCAGGGGGTGGGCGAAGAACTCCAGCATGAGATCCCCGGCTTGGAGGATCATCCAGCCGGCGTCCCGGAAAACGAT CCGCTCAGAAGAACTCGTCAAGAAGGCGATAGAAGGCGATGCGCTGCGAATCGGGAGCGGCGATACCGTAAAGCACGAGGAAGCGGTCAGCCCATTC GCCGCCAAGCTCTTCAGCAATATCACGGGTAGCCAACGCTATGTCCTGATAGCGGTCCGCCACACCCAGCCGGCCACAGTCGATGAATCCAGAAAAG $\tt CGGCCATTTTCCACCATGATATTCGGCAAGCAGGCATCGCCATGGGTCACGACGAGAGATCCTCGCCGTCGGGCATGCGCGCCTTGAGCCTGGCGAACA$ GTTCGGCTGGCGCGAGCCCCTGATGCTCTTCGTCCAGATCATCCTGATCGACAAGACCGGCTTCCATCCGAGTACGTGCTCGATGCGATGTTT CGCTTGGTCGAATGGGCAGGTAGCCGGATCAAGCGTATGCAGCCGCCGCATTGCATCAGCCATGATACTTTCTCGGCAGGAGCAAGGTGA GATGACAGGAGATCCTGCCCGGCACTTCGCCCAATAGCAGCCAGTCCCTTCCCGCTTCAGTGACAACGTCGAGCACAGCTGCGCAAGGAACGCCCG TGACAGCCGGAACACGGCGCATCAGAGCAGCCGATTGTCTGTTGTGCCCAGTCATAGCCGAATAGCCTCTCCACCCAAGCGGCCGGAGAACCTGCG TGCAATCCTTGTTCAATCATGCGAAACGATCCTCATCCTGTCTCTTGATCAGATCTTGATCCCCGCGCCATCAGATCCTTGGCGGCAAGAAAG $\tt CTATCGCCATGTAAGCCCACTGCAAGCTACCTGCTTTCTCTTTGCGCTTGCGTTTTCCCTTGTCCAGATAGCCCAGTAGCTGACATTCATCCGGGGT$ TAAATTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAAGAATAGCCCGAGATAGGGTTGAGTGT TGTTCCAGTTTGGAACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAACCGTCTATCAGGGCGGATGGCCGGATCAGCTTA GCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAAGGCCAG CAAAAGGCCAGGAACCGTAAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGACATCACAAAAATCGACGCTCAAGTCAGA GGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATA

SEQ ID 52

GCCGCGGAATTTCGACTCTAGGCCATTGCATACGTTGTATCTATATCATAATATGTACATTTATATTGGCTCATGTCCAATATGACCGCCATGTTGA CATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCCATATATGGAGTTCCGCGTTACATAACTTACGGTAAATG GCCCGCCTGGCTGACCGCCCAACGACCCCCCCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCA ATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTCCGCCCCCTATTGACGTCAATGACGGTAAATGG $\tt CCCGCCTGGCATTATGCCCAGTACATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGT$ AAATCAACGGGACTTTCCAAAATGTCGTAATAACCCCGCCCCGTTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCT $\tt CGTTTAGTGAACCGTCAGATCGCCTGGAGACGCCATCCACGCTGTTTTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTCCGCGGCCGGGAAC$ A GACTGACACGGACTCTGTATTTTTACAGGATGGGGTCCCATTTATTATTTACAAATTCACATATACAACAACGCCGTCCCCCGTGCCCGCAGTTTTTATTAAACATAGCGTGGGATCTCCACGCGAATCTCGGGTACGTGTTCCGGACATGGGCTCTTCTCCGGTAGCGGCGGAGCTTCCACATCCGAGCCCT GGTCCCATGCCTCCAGCGGCTCATGGTCGCTCGGCAGCTCCTTGCTCCTAACAGTGGAGGCCAGACTTAGGCACAACAATGCCCACCACCACCACCAC TGTGCCGCACAAGGCCGTGGCGGTAGGGTATGTGTCTGAAAATGAGCTCGGAGATTGGGCTCGCACCGCTGACGCAGATGGAAGACTTAAGGCAGCG GCAGAAGAAGATGCAGGCAGCTGAGTTGTTGTATTCTGATAAGAGTCAGAGGTAACTCCCGTTGCGGTGCTGTTAACGGTGGAGGGCAGTGTAGTCT ${\tt GAGCAGTACTCGTTGCCGCGCGCGCCACCAGACATAATAGCTGACAGACTAACAGACTGTTCCTTTCCATGGGTCTTTTCTGCAGTCACCGTCg}$ $\verb|ctactgcgtgtgcgtggagcgcagccgcctgcacttcgtgctgtacgcttaaagaattcAGACTCGAGCAAGTCTAGAAAGCCATGGA|$ ${\tt GACCCTGGAAGGTGCCACTCCCACTGTCCTTTCCTAATAAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTCATTCTATTCTGGGGGGGTGGG}\\$ $\tt CCGGCGTCCCGGAAAACGATTCCGAAGCCCAACCTTTCATAGAAGGCGGCGGTGGAATCGAAATCTCGTGATGGCAGGTTGGGCGTCGCTTGGTCGG$ AGTCGATGAATCCAGAAAAGCGGCCATTTTCCACCATGATATTCGGCAAGCAGGCATCGCCATGGGTCACGACGAGATCCTCGCCGTCGGGCATGCG $\tt CGCCTTGAGCCTGGCGAACAGTTCGGCTGGCGCGAGCCCCTGATGCTCTTCGTCCAGATCATCCTGATCGACAAGACCGGCTTCCATCCGAGTACGT$ ${\tt GCTCGCTCGATGCGATGTTTCGCTTGGTGGTCGAATGGGCAGGTAGCCGGATCAAGCGTATGCAGCCGCCGCATTGCATCAGCCATGATGGATACTT}$ TCTCGGCAGGAGCAAGGTGAGATGACAGGAGATCCTGCCCCGGCACTTCGCCCCAATAGCAGCCAGTCCCTTCCCGCTTCAGTGACAACGTCGAGCAC AGAACCGGGCGCCCCTGCGCTGACAGCCGGAACACGGCGGCATCAGAGCAGCCGATTGTCTGTTGTGCCCAGTCATAGCCGAATAGCCTCTCCACCC AAGCGGCCGGAGAACCTGCGTGCAATCCATCTTGTTCAATCATGCGAAACGATCCTCATCCTGTCTCTTGATCAGATCTTGATCCCCTGCGCCCATCA ${\tt CATAAAACCGCCCAGTCTAGCTATCGCCATGTAAGCCCACTGCAAGCTACCTGCTTTCTCTTTTGCGCTTTCCCTTGTCCAGATAGCCCAGT}$ AGCTGACATTCATCCGGGGTCAGCACCGTTTCTGCGGACTGGCTTTCTACGTGTTCCGCTTTCTTAGCAGCCCTTGCGCCCTGAGTGCTTGCGGCA ${\tt GCGTGAAGCTAATTCATGGTTAAATTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCCGAAAATCGGCAAAATCCCTTATAAATCAAAAGAATAG$ CCCGAGATAGGGTTGAGTGTTGCTTCCAGTTTGGAACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAAACCGTCTATCAGG AAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCG ACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGG ACACGACTTATCGCCACTGGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAAC GTGATCCCCACCGGAATTGCG

SEQ ID 53

CATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAACTTACGGTAAATG ${\tt GCCCGCCTGGCTGACCGCCCAACGACCCCCCCCCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCA}$ ATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTCCGCCCCCTATTGACGTCAATGACGGTAAATGG CCCGCCTGGCATTATGCCCAGTACATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGT AAATCAACGGGACTTTCCAAAATGTCGTAATAACCCCGCCCCGTTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCT CGTTTAGTGAACCGTCAGATCGCCTGGAGACGCCATCCACGCTGTTTTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTCCGCGGCCGGAAC GTTTTTGGCTTGGGGCCTATACACCCCCGCTTCCTTATGCTATAGGTGATGGTATAGCTTAGCCTATAGGTGTGGGTTATTGACCATTATTGACCAC TCCCCTATTGGTGACGATACTTTCCATTACTAATCCATAACATGGCTCTTTGCCACAACTATCTCTATTGGCTATATGCCAATACTCTGTCCTTCAG AGACTGACACGGACTCTGTATTTTTACAGGATGGGGTCCCATTTATTATTTACAAATTCACATATACAACACGCCGTCCCCCGTGCCCGCAGTTTT TATTAAACATAGCGTGGGATCTCCACGCGAATCTCGGGTACGTGTTCCGGACATGGGCTCTTCTCCGGTAGCGGCGGAGCTTCCACATCCGAGCCCT GGTCCCATGCCTCCAGCGGCTCATGGTCGCTCGGCAGCTCCTTGCTCCTAACAGTGGAGGCCAGACTTAGGCACAGCACAATGCCCACCACCACCACCAC TGTGCCGCACAAGGCCGTGGCGGTAGGGTATGTGTCTGAAAATGAGCTCGGAGATTGGGCTCGCACCGCTGACGCAGATGGAAGACTTAAGGCAGCG ${\tt GAGCAGTACTCGTTGCTGCCGCGCGCCACCAGACATAATAGCTGACAGACTAACAGACTGTTCCTTTCCATGGGTCTTTTCTGCAGTCACCGTCG}$ aaatctaattacqctatttcaaacaataqaacaattctgcccatggtttccagaacagggaactttagatctaaaaagattgggaaaaaattggcaaa qaattaaaacaagcaaatagggaaggtaaaatcatcccacttacagtatggaatgattgggccattattaaagcaactttagaaccatttcaaacag qaqaaqatattqtttcagtttctgatgcccctaaaagctgtgtaacagattgtgaagaagaggcagggacagaatcccagcaaggaacggaaagttc acattgtaaatatgtagcagagtctgtaatggctcagtcaacgcaaaatgttgactacagtcaattacaggagataatataccctgaatcatcaaaa ${\tt ttgggggaaggaggtccagaatcattggggccatcagagcctaaaccacgatcgccatcaactcctcccgtggttcagatgcctgtaacattac$ aacctcaaacgcaggttagacaagcacaaaccccaagagaaaatcaagtagaaagggacagagtctctatcccggcaatgccaactcagatacagta $\verb|tccacea | tatcagccggtagaaaataagacccaaccgctggtagtttatcaataccggctgccaaccgagcttcagtatcggcctccttcagaggtt|$ caatacagacctcaagcggtgtgtcctgtgccaaatagcacggcaccataccagcaacccacagcgatggcgtctaattcaccagcaacacaggacg cggcgctgtatcctcagccgcccactgtgagacttaatcctacagcatcacgtagtggacagggtggtgcactgcattgcagtcattgatgaagccagaaaacagggcgatcttgaggcatggcggttcctggtaattttacaactggtacaggccggggaagagactcaagtaggagcgcctgcccgagctgag ${\tt attccattgctcatggaaatagacttactccttatgactgggaaattttggccaaatcttccctttcatcctctcagtatctacagtttaaaacctg}$ gtggattgatggagtacaagaacaggtacgaaaaatcaggctactaagcccactgttaatatagacgcagaccaattgttaggaacaggtccaaat ${\tt tggagcaccattaaccaacaatcagtgatgcagaatgaggctattgaacaagtaagggctatttgcctcagggcctggggaaaaattcaggacccag}$ qaa caqctttccctattaattcaattagacaaggctctaaagagccatatcctgactttgtggcaagattacaagatgctgctcaaaagtctattacaqatqacaatqcccqaaaaqttattqtaqaattaatggcctatgaaaatqcaaatccagaatqtcagtcggccataaagccattaaaaggaaaagtt ccaqcaqqaqttqatqtaattacaqaatatqtgaagqcttqtqatqqqattqqaqqqctatqcataaggcaatqctaatqqctcaaqcaatqaqqq qqctcactctaqqaqqacaaqttaqaacatttgggaaaaaatgttataattgtggtcaaatcggtcatctgaaaaggagttgcccagtcttaaataa tgtttgttcctcagggttttcaaggacaacaacccctacagaaaataccaccacttcagggagtcagccaattacaacaatccaacagctgtcccgcqccacaqcaqqcaqcaccqcaqtaaqaattcaqactcqaqcaaqtctaqaAAGCCATGGATATCGGATCCACTACGCGTTAGAGCTCGCTGATCAGC TAAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTCATTCTATTCTGGGGGGGTGGGGCAGGACAGCAAGGGGGAGGATTGGGAAGACA ATAGCAGGGGGGTGGCGAAGAACTCCAGCATGAGATCCCCGCGCTGGAGGATCATCCAGCCGGCGTCCCGGAAAACGATTCCGAAGCCCAACCTTT TCAAGAAGGCGATAGAAGGCGATGCGCTGCGAATCGGGAGCGGCGATACCGTAAAGCACGAGGAAGCGGTCAGCCCATTCGCCGCCAAGCTCTTCAG CARTATCACGGGTAGCCAACGCTATGTCCTGATAGCGGTCCGCCACACCCAGCCGGCCACAGTCGATGAATCCAGAAAAGCGGCCATTTTCCACCAT GATATTCGGCAAGCAGGCATCGCCATGGGTCACGACGAGATCCTCGCCGTCGGGCATGCGCGCCTTGAGCCTGGCGAACAGTTCGGCTGGCGCGAGC ${\tt GGCAGGTAGCCGGATCAAGCGTATGCAGCCGCCATTGCATCAGCCATGATGGATACTTTCTCGGCAGGAGCAAGGTGAGATGACAGGAGATCCTG}$ $\tt CGGCATCAGAGCAGCCGATTGTCTGTTGTGCCCAGTCATAGCCGAATAGCCTCTCCACCCAAGCGGCCGGAGAACCTGCGTGCAATCCATCTTGTTC$ AATCATGCGAAACGATCCTCATCCTGTCTCTTGATCAGATCTTGATCCCCTGCGCCATCAGATCCTTGGCGGCAAGAAAGCCATCCAGTTTACTTTG ${f ACTGGCTTTCTACGTGTTCCGCTTCCTTTAGCAGCCCTTGCGCCCTGAGTGCTTGCGGCAGCGTGAAGCTAATTCATGGTTAAATTTTTTGTTAAATC$

SEQ ID 54

GCCGCGGAATTTCGACTCTAGGCCATTGCATACGTTGTATCTATATCATAATATGTACATTTATATTGGCTCATGTCCAATATGACCGCCATGTTGA CATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCCATATATGGAGTTCCGCGTTACATAACTTACGGTAAATG GCCCGCCTGGCTGACCGCCCAACGACCCCCCCCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCA ATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTCCGCCCCCTATTGACGTCAATGACGGTAAATGG $\tt CCCGCCTGGCATTATGCCCAGTACATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGT$ AAATCAACGGGACTTTCCAAAATGTCGTAATAACCCCGCCCCGTTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCT GTTTTTGGCTTGGGGCCTATACACCCCCGCTTCCTTATGCTATAGGTGATGGTATAGCTTAGCCTATAGGTGTGGGTTATTGACCATTATTGACCAC A GACTGACACGGACTCTGTATTTTTACAGGATGGGGTCCCATTTATTATTTACAAATTCACATATACAACAACGCCGTCCCCCGTGCCCGCAGTTTTTATTAAACATAGCGTGGGATCTCCACGCGAATCTCGGGTACGTGTTCCGGACATGGGCTCTTCTCCGGTAGCGGCGGAGCTTCCACATCCGAGCCCTTGTGCCGCACAAGGCCGTGGCGGTAGGGTATGTGTCTGAAAATGAGCTCGGAGATTGGGCTCGCACCGCTGACGCAGATGGAAGACTTAAGGCAGCG GCAGAAGAAGATGCAGGCAGCTGAGTTGTTGTATTCTGATAAGAGTCAGAGGTAACTCCCGTTGCGGTGCTGTTAACGGTGGAGGGCAGTGTAGTCT GAGCAGTACTCGTTGCTGCCGCGCGCGCCCACCAGACATAATAGCTGACAGACTAACAGACTGTTCCTTTCCATGGGTCTTTTCTGCAGTCACCGTCG $\verb|tcgacgccaccatgggccagaccaagagcaagatcaagagcaagtacgccagctacctgagcttcatcaagatcctgctgaagcgcggcgtgaa|$ ggtgagcaccaagaacctgatcaagctgttccagatcatcgagcagttctgcccctggttccccgagcagggcaccctggacctgaaggactggaag cgcatcggcaaggagctgaagcaggccggcaagggcaacatcatccccctgaccgtgtggaacgactgggccatcatcaaggccgccctggagc $\tt gaccgagggcctgcactgcgagtacgtggccgagcccgtgatggcccagagcacccagaacgtggactacaaccagctgcaggaggtgatctacccc$ $\tt gagaccctgaagctggagggcaagggccccgagctggtgggccccagcgagagcaagccccgggcaaccagccccctgcccggccaggtgcccg$ tgaccctgcagccccagaagcaggtgaaggagaacaagacccagcccccgtggcctaccagtactggccccccgagctgcagtaccgccccccgggcgtgaagcagtacggccccaacagcccctacatgcgcaccctgctggacagcatcgcccaccggccaccgcctgatcccctacgactgggagatcagaacgccaaccccgagtgccagagcgccatcaagcccctgaagggcaaggtgcccgccggcagcgacgtgatcagcgagtacgtgaaggcctgcgagcgcggccagccccaggcccccagcagaccggcgccttccccatccagcccttcgtgccccagggcttccagggccagcagcccccctgagccag GGAGGATCATCCAGCCGGCGTCCCGGAAAACGATTCCGAAGCCCAACCTTTCATAGAAGGCGGCGGTGGAATCGAAATCTCGTGATGGCAGGTTGGG ACCCAGCCGGCCACAGTCGATGAATCCAGAAAAGCGGCCATTTTCCACCATGATATTCGGCAAGCAGGCATCGCCATGGGTCACGACGAGATCCTCG $\tt CCGTCGGGCATGCGCCCTTGAGCCTGGCGAACAGTTCGGCTGGCGCGAGCCCCTGATGCTCTTCGTCCAGATCATCCTGATCGACAAGACCGGCTT$

TAGCCTCTCCACCCAAGCGGCCGGAGAACCTGCGTGCAATCCATCTTGTTCAATCATGCGAAACGATCCTCATCCTGTCTCTTGATCAGATCTTGAT GTTCGCTTGCTGTCCATAAAACCGCCCAGTCTAGCTATCGCCATGTAAGCCCACTGCAAGCTACCTGCTTTCTCTTTTGCGCTTGCGTTTTCCCTTGT GAGTGCTTGCGGCAGCGTGAAGCTAATTCATGGTTAAATTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCCGAAAATCGGCAAAATCCCTTATA AATCAAAAGAATAGCCCGAGATAGGGTTGAGTGTTCTTCCAGTTTGGAACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAA AACCGTCTATCAGGGCGATGGCCGGATCAGCTTATGCGGTGTGAAATACCGCACAGATGCGTAAGGAGAAAATACCGCATCAGGCGCTCTTCCGCTT GACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGC AGTGGTGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAAGAGTTGGTAGCTCTTG TTTTCTACTGAACGGTGATCCCCACCGGAATTGCG

SEQ ID 55

 ${\tt CATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAACTTACGGTAAATG}$ $\tt CCCGCCTGGCATTATGCCCAGTACATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGT$ AAATCAACGGGACTTTCCAAAATGTCGTAATAACCCCGCCCCGTTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCT TCCCCTATTGGTGACGATACTTTCCATTACTAATCCATAACATGGCTCTTTGCCACAACTATCTCTATTGGCTATATGCCAATACTCTGTCCTTCAG AGACTGACACGGACTCTGTATTTTTACAGGATGGGGTCCCATTTATTATTATTACAAATTCACATATACAACAACGCCGTCCCCCGTGCCCGCAGTTTT TATTAAACATAGCGTGGGATCTCCACGCGAATCTCGGGTACGTGTTCCGGACATGGGCTCTTCTCCGGTAGCGGCGGAGCTTCCACATCCGAGCCCT GGTCCCATGCCTCCAGCGGCTCATGGTCGCTCGGCAGCTCCTTGCTCCTAACAGTGGAGGCCAGACTTAGGCACAACAATGCCCACCACCACCAC TGTGCCGCACAAGGCCGTGGCGGTAGGGTATGTGTCTGAAAATGAGCTCGGAGATTGGGCTCGCACCGCTGACGCAGATGGAAGACTTAAGGCAGCG ${\tt GCAGAAGAAGATGCAGGCAGCTGAGTTGTTGTATTCTGATAAGAGTCAGAGGTAACTCCCGTTGCGGTGCTGTTAACGGTGGAGGGCAGTGTAGTCT}$ ${\tt tcgacgccaccatgtgggccaccatcgtgggcaagcgcccaagggccccgccagcggccccaccaaccagcggcatccccaaccagcgccatctg}$ ${\tt cagcagcggcttcagcggcaccaccaccaccgtgcccagcgtgagcggcaaccagccgtgaccaccatccagcagctgagccccgccaccagc}$ ggcagccgccgtggacctgtgcaccatccaggccgtgagcctgctgcccggcgagccccccagaagacccccaaccggcgtgtacggcccctgcccaagggcaccgtgggcctgatcctgggccgcagcagcctgaacctgaagggcgtgcagatccacaccagcgtggtggacagcgactacaagggcga gatccagctggtgatcagcagcagcatcccctggagcgccagcccccgcgaccgcatcgcccagctgctgctgctgccctacatcaagggcggcaac aggccatcatccagggcaagcagttcgagggcctggtggacaccggcgccgacgtgagcatcatcgccctgaaccagtggcccaagaactggcccaa gcagaaggccgtgaccggcctggtgggcatcggcaccgccagcgaggtgtaccagagcaccgagatcctgcactgcctgggccccgacaaccaggag gctacagccccaccagccagaagatcatgaccaagatgggctacatccccggcaagggcctgggcaagaacgaggacggcatcaagatccccgtgga ggccaagatcaaccaggagcgcgagggcatcggcaacccctgcgcttaaagaattcAGACTCGAGCAAGTCTAGAAAGCCATGGATATCGGATCCAC TGCCACTCCCACTGTCCTTTCCTAATAAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTCATTCTATTCTGGGGGGTGGGGTGGGGCAGGAC AGCAAGGGGGAGGATTGGGAAGACAATAGCAGGGGGGTGGGCGAAGAACTCCAGCATGAGATCCCCGCGCTGGAGGATCATCCAGCCGGCGTCCCGG CCAGAGTCCCGCTCAGAAGAACTCGTCAAGAAGGCGATAGAAGGCGATGCGCTGCGAATCGGGAGCGGCGATACCGTAAAGCACGAGGAAGCGGTCA CAGAAAAGCGGCCATTTTCCACCATGATATTCGGCAAGCAGGCATCGCCATGGGTCACGACGAGATCCTCGCCGTCGGGCATGCGCCCTTGAGCCT ${\tt GGCGAACAGTTCGGCTGGCGCGAGCCCCTGATGCTCTTCGTCCAGATCATCCTGATCGACAAGACCGGCTTCCATCCGAGTACGTGCTCGATG}$ CAAGGTGAGATGACAGGAGATCCTGCCCCGGCACTTCGCCCAATAGCAGCCCGTTCCCCGTTCAGTGACAACGTCGAGCACAGCTGCGCAAGG

 ${\tt AACCTGCGTGCAATCCATCTTGTTCAATCATGCGAAACGATCCTCATCCTGTCTCTTGATCAGATCCTTGATCCCCTGCGCCATCAGATCCTTGGCGG}$ ${\tt CAAGAAAGCCATCCAGTTTACTTTGCAGGGCTTCCCAACCTTACCAGAGGGCGCCCCAGCTGGCAATTCCGGTTCGCTTGCTGTTCCATAAAACCGCC}$ ${\tt TCCGGGGTCAGCACCGTTTCTGCGGACTGGCTTTCTACGTGTTCCGCTTCCTTTAGCAGCCCTTGCGCCCTGAGTGCTTGCGGCAGCGTGAAGCTAA$ TTCATGGTTAAATTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAAGAATAGCCCGAGATAGGG GTCGTTCGGCTGCGGCGGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAA AAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTC AAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTT ${\tt ACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCGCTCCAAGTTCTCAAGTTCGCTCCAAGTTCGCTCCAAGTTCGCTCCAAGTTCGCTCCAAGTTCGCTCCAAGTTCGCTCCAAGTTCGCTCCAAGTTCGCTCCAAGTTCGCTCCAAGTTCGCTCCAAGTTCGCTCCAAGTTCGCTCCAAGTTCGCTCCAAGTTCGCTCAAGTTCGCTCAAGTTCGCTCCAAGTTCGCTCCAAGTTCAAGTTCGCTCCAAGTTCGCTCAAGTTCAAG$ AGCTGGGCTGTGTGCACGAACCCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATC GCCACTGGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACT AGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAAGGGTTGGTAGCTCTTGATCCGGCAAACAACCACCGCTGGTA ${\tt GCGGTGGTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACTGAACGGTGATCCCCACC}$ GGAATTGCG

SEQ ID 56

GCCGCGGAATTTCGACTCTAGGCCATTGCATACGTTGTATCTATATCATAATATGTACATTTATATTTGGCTCATGTCCAATATGACCGCCATGTTGA CATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAACTTACGGTAAATG GCCCGCCTGGCTGACCGCCCAACGACCCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCA ATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTCCGCCCCCTATTGACGTCAATGACGGTAAATGG CCCGCCTGGCATTATGCCCAGTACATGACCTTACGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTAAATCAACGGGACTTTCCAAAATGTCGTAATAACCCCGCCCCGTTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCT CGTTTAGTGAACCGTCAGATCGCCTGGAGACGCCATCCACGCTGTTTTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTCCGCGGCCGGGAAC GTTTTTGGCTTGGGGCCTATACACCCCCGCTTCCTTATGCTATAGGTGATGGTATAGCTTAGCCTATAGGTGTGGGTTATTGACCATTATTGACCAC TCCCCTATTGGTGACGATACTTTCCATTACTAATCCATAACATGGCTCTTTTGCCACAACTATCTCTATTGGCTATATGCCAATACTCTGTTCAG AGACTGACACGGACTCTGTATTTTTACAGGATGGGGTCCCATTTATTATTTACAAATTCACATATACAACACGCCGTCCCCGTGCCCGCAGTTTT TATTAAACATAGCGTGGGATCTCCACGCGAATCTCGGGTACGTGTTCCGGACATGGGCTCTTCTCCGGTAGCGGCGGAGCTTCCACATCCGAGCCCT GGTCCCATGCCTCCAGGGGCTCATGGTCGCTCGGCAGCTCCTTGCTCCTAACAGTGGAGGCCAGACTTAGGCACACAATGCCCACCACCACCAC TGTGCCGCACAAGGCCGTGGCGGTAGGGTATGTGTCTGAAAATGAGCTCGGAGATTGGGCTCGCACCGCTGACGCAGATGGAAGACTTAAGGCAGCG GCAGAAGAAGATGCAGGCAGCTGAGTTGTTTGTATTCTGATAAGAGTCAGAGGTAACTCCCGTTGCGGTGCTGTTAACGGTGGAGGGCAGTGTAGTCT GAGCAGTACTCGTTGCTGCCGCCGCCGCCACCAGACATAATAGCTGACAGACTAACAGACTGTTCCTTTCCATGGGTCTTTTCTGCAGTCACCGTCq tcgacgccaccatgaacaagagccgcaagcgccgcaaccgcgagagcctgctggggcgccaccgtggagccccccaagcccatcccctgacctg qaaqaccqaqaaqcccqtqtqqqqtqaaccaqtqqcccctqcccaaqcaqaaqctqqaqqcctqcacctqctqqccaacqaqctqqaqaaqqqqc acgccgtgatccagcccatgggcccctgcagcccggcctgcccagccccgccatgatccccaaggactggcccctgatcatcatcgacctgaagga ctgcttcttcaccatcccctggccgagcaggactgcgagaagttcgccttcaccatccccgccatcaacaacaaggagcccgccacccgcttccag tggaaggtgctgccccagggcatgctgaacagccccaccatctgccagaccttcgtgggccgcgccctgcagcccgtgcgcgagaagttcagcgact gctacatcatcactgcatcgacgacatcctgtgcgccgacgagaccaaggacaagctgatcgactgctacaccttcctgcaggccgaggtggccaa cgccqqcctqqccatcqccagcqacaagatccagaccagcaccccttccactacctgggcatqcagatcgagaaccgcaagatcaagccccagaag atcgagatccqcaaggacaccctgaagaccctgaacqacttccagaagctqctgggggacatcaactggatccgccccaccttgggcatccccacct acgecat gag caacct gtt cag catcct gcg cgg cgacag cgacct gaacag cgacat gct gaccccc gag gccaccaag gag at caa gct ggtggaggagaagatccagagcccagatcaaccgcatcgaccccttggcccccttgcagctgctgatcttcgccaccgcccacagccccaccggcatc atcatccagaacaccgacctgqtgqaqttqcaqcttcctgccccacaqcaccqtgaaqaccttcaccctgtacctggaccagatcgccaccctqatcg qccaqacccqcctqcqcatcatcaaqctqtqcqqcaacqaccccqacaaqatcqtqqtqcccttqaccaaqqaqcaqqtqcqccaqqccttcatcaa cagcqqcqctqqaaqatcqqcctqqccaacttcqtqqqcatcatcqacaaccactaccccaaqaccaaqatcttccaqttcctqaaqctqaccacc tggatcctgcccaagatcaccgcgcgcgcgccctggagaacgccctgaccgtgttcaccgacggcagcagcaacggcaaggccgcctacaccggcc ${\tt ccaaggagcgcgtgatcaagaccccctaccagagcgcccagcgcgccgagctggtggccgtgatcaccgtgctgcaggacttcgaccagcccatcaa}$ aacctgctqcaqcaqaccgtqcqcaaqcgcaacttccccttctacatcacccacatccqcqccccacacctacccgqccccctqaccaaggcca acgag cagg ccgacctg ctggtg ag cagcg ccctgat caagg cccagg ag ctgcacgccctgacccacgtg acgccgccgccctg aag acaagttggcctgtgccccaacgccctgtggcagatggacgtgacccacgtgcccagcttcggccgcctgagctacgtgcacgtgaccgtggacacctacagcc actteatetgggccacctgccagaccggcgagagcaccagccacgtgaagaagcacctgctgagctgcttcgccgtgatgggcgtgcccgagaagat

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SEQ ID 57

ATGAACCCATCAGAGATGCAAAGAAAAGCACCTCCGCGGAGACGGAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAATGGTGACGT CAGAAGAACAGATGAAGTTGCCATCCACCAAGAAGGCAGACCGCCAACTTGGGCACAACTAAAGAAGCTGACGCAGTTAGCTACAAAATATCTAGA GAACACAAAGGTGACACAAACCCCAGAGAGTATGCTGCTTGCAGCCTTGATGATTGTATCAATGGTGTCTGCAGGTGTACCCAACAGCTCCGAAGAG ACAGCGACCATCGAGAACGGGCCATGA

SEQ ID 58

SEQ ID 59

ATGAACCCATCGGAGATGCAAAGAAAAGCACCTCCGCGGAGACGGAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAATGGTGACGT
CAGAAGAACAGATGAAGTTGCCATCCACCAAGAAGGCAGAGCCGCCAACTTGGGCACAACTAAAGAAGCTGACGCAGTTAGCTACAAAAATATCTAGA
GAACACAAAAGGTGACACAAACCCCAGAGAGTATGCTGCTTGCAGCCTTGATGATTGTATCAATGGTGGTTACCCAACAGCTCCGAAGAGACACGCG
CCATCGAGAACGGGCCATGATGACGATGGCGGTTTTGTCGAAAAGAAAAGGGGGGAAATGTGGGGGAAAAGCAAGAGAGATCAGATTGTTACTGTTCT
GTGTAGAAAGAAGTAGACATAGGAGACTCCATTTTGTTCTGTACTAA

SEQ ID 60

CCCAGCCGCACCGACGACGACGACGGCGGCTTCGTGGAGAAGAAGCGCGGCAAGTGCGGCGAGAAGCAGGAGCGCAGCGACTGCTACTGCGTGTGCGCGCAGCGCCACCGCCGCCGCCTCCACTTCGTGCTGTACGCTTAA

SEQ ID 61

ATGGGGCAAACTAAAAGTAAAATTAAAAGTAAATATGCCTCTTATCTCAGCTTTATTAAAATTCTTTTAAAAAGAGGGGGGAGTTAAAGTATCTACAA AAAATCTAATCAAGCTATTTCAAATAATAGAACAATTTTGCCCATGGTTTCCAGAACAAGGAACTTTAGATCTAAAAGATTGGAAAAGAATTGGTAA GGAACTAAAACAAGCAGGTAGGAAGGGTAATATCATTCCACTTACAGTATGGAATGATTGGGCCATTATTAAAGCAGCTTTAGAACCATTTCAAACA TACATTGCGAATATGTAGCAGAGCCGGTAATGGCTCAGTCAACGCAAAATGTTGACTATAATCAATTACAGGAGGTGATATATCCTGAAACGTTAAA ATTAGAAGGAAAAGGTCCAGAATTAGTGGGGCCCATCAGAGTCTAAACCACGAGGCACAAGTCCTCTTCCAGCAGGTCAGGTGCCTGTAACATTACAACCTCAAAAGCAGGTTAAAGAAAATAAGACCCAACCGCCAGTAGCCTATCAATACTGGCCTCCGGCTGAACTTCAGTATCGGCCACCCCCAGAAAGTC AGTATGGATATCCAGGAATGCCCCCAGCACCACAGGGCAGGGCGCCATACCCTCAGCCGCCCACTAGGAGACTTAATCCTACGGCACCACCTAGTAG GGAGAAGGAGCCCAAGAGAGGGAGACCTCCCACAGTTGAGGCCAGATACAAGTCTTTTTCGATAAAAAAAGCTAAAAGATATGAAAGAGGGAGTAAAAC AGTATGGACCCAACTCCCCTTATATGAGGACATTATTAGATTCCATTGCTCATGGACATAGACTCATTCCTTATGATTGGGAGATTCTGGCAAAATC GTCTCTCTCACCCTCTCAATTTTTACAATTTAAGACTTGGTGGATTGATGGGGTACAAGAACAGGTCCGAAGAAATAGGGCTGCCAATCCTCCAGTT AACATAGATGCAGATCAACTATTAGGAATAGGTCAAAATTGGAGTACTATTAGTCAACAAGCATTAATGCAAAAATGAGGCCATTGAGCAAGTTAGAG CTATCTGCCTTAGAGCCTGGGAAAAAATCCAAGACCCAGGAAGTACCTGCCCCTCATTTAATACAGTAAGACAAGGTTCAAAAAGAGCCCTATCCTGA TTTTGTGGCAAGGCTCCAAGATGTTGCTCAAAAGTCAATTGCTGATGAAAAAGCCCGTAAGGTCATAGTGGAGTTGATGACATATGAAAACGCCAAT ${\tt CCTGAGTGTCAATCAGCCATTAAGCCATTAAAAGGAAAGGTTCCTGCAGGATCAGATGTAATCTCAGAATATGTAAAAGCCTGTGATGGAATCGGAGATCAGATGTAATCTCAGAATATGTAAAAGCCTGTGATGGAATCGGAGATCAGATGTAATCTCAGAATATGTAAAAGCCTTGTGATGGAATCGGAGATCAGATGTAATCTCAGAATATGTAAAAGCCTTGTGATGGAATCGGAGATCAGATGTAATCTCAGAATATGTAAAAGCCTTGTGATGGAATCGGAGATCAGATGTAATCTCAGAATATCTCAGAATATGTAAAAGCCTTGTGATGGAATCGGAGATCAGATGTAATCTCAGAATATGTAAAAGCCTTGTGATGGAATCGGAGATCAGATGTAATCTCAGAATATGTAAAAGCCTTGTGATGGAATCGGAATCGGAGATCAGATGTAATCTCAGAATATGTAAAAGCCTTGTGATGGAATCGGAATCAGATGTAATCTCAGAATATGTAAAAGCCTTGTGATGGAATCGGAATCAGATGTAATCTCAGAATATGTAAAAGCCTTGTGATGGAATCGGAATCAGATGTAATCTCAGAATATGTAAAAAGCCTTGTGATGGAATCGGAATCAGATGTAATCTCAGAATATGTAAAAAGCCTTGTGATGGAATCGGAATCAGATGTAATGTAAAAAGCCTTGTGATGGAATCAGAATATGTAAAAAGCCTTGTGATGGAATCA$ GAGCTATGCATAAAGCTATGCTTATGGCTCAAGCAATAACAGGAGTTGTTTTAGGAGGACAAGTTAGAACATTTGGAAGAAAATGTTATAATTGTGG CCAAGATGTAAAAAAGGAAAACATTGGGCTAGTCAATGTCGTTCTAAATTTGATAAAAATGGGCAACCATTGTCGGGAAACGAGCAAAGGGGCCCAGC $\tt CTCAGGCCCCACAACAACTGGGGCATTCCCAATTCAGCCATTTGTTCCTCAGGGTTTTCAGGGACAACCACCCCCACTGTCCCAAGTGTTTCAGGG$ AATAAGCCAGTTACCACAATACAACAATTGTCCCCCGCCACAAGCGGCAGTGCAGCAGTAG

SEQ ID 62

ATGGGCCAGACCAAGAGCAAGATCAAGAGCAAGTACGCCAGCTACCTGAGCTTCATCAAGATCCTGCTGAAGCGCGGCGGCGTGAAGGTGAGCACCA AGAACCTGATCAAGCTGTTCCAGATCATCGAGCAGTTCTGCCCCTGGTTCCCCGAGCAGGGCACCCTGGACCTGAAGGACTGGAAGCGCATCGGCAA GGAGCTGAAGCAGGCCGCCCCAAGGGCAACATCATCCCCCTGACCGTGTGGAACGACTGGGCCATCATCAAGGCCGCCCTGGAGCCCTTCCAGACC GAGGAGGACAGCGTGAGCGTGAGCGCCCCCGGCAGCTGCATCATCGACTGCAACGAGAACACCCGCAAGAAGAGCCAGAAGGAGCCGAGAGGGCC TGCACTGCGAGTACGTGGCCCGAGCCCCGTGATGGCCCAGAGCACCCAGAACGTGGACTACAACCAGCTGCAGGAGGTGATCTACCCCGAGACCCTGAA GCTGGAGGGCAAGGGCCCCGAGCTGGTGGGCCCCAGCGAGAGCAAGCCCCGGGGCACCAGCCCCTGCCCGGCCAGGTGCCCGTGACCCTGCAG AGTACGCTACCCCGGCATGCCCCCCCCCCCCAGGGCCGCCCCCTACCCCCAGCCCCCACCGCCGCCTGAACCCCCACCGCCCCCCAGCCC GGCGAGGGCCCCAGGAGGCCCCCCACCGTGGAGGCCCGCTACAAGAGCTTCAGCATCAAGAAGCTGAAGGACATGAAGGAGGGCGTGAAGC AGTACGGCCCCAACAGCCCCTACATGCGCACCCTGCTGGACAGCATCGCCCACGGCCACCGCCTGATCCCCTACGACTGGGAGATCCTGGCCAAGAG CAGCCTGAGCCCCAGCTAGTTCCTGCAGTTCAAGACCTGGTGGATCGACGGCGTGCAGGAGCAGGTGCGCCGAACCGCCCCAACCCCCCCTGCCATCTGCCTGCGCCCTGGGAGAAGATCCAGGACCCCGGCAGCACCTGCCCCAGCTTCAACACCGTGCGCCAGGGCAGCAAGGAGCCCTACCCCGAGCGCCATGCACAAGGCCATGCTGATGGCCCAGGCCATCACCGGCGTGGTGCTGGGCGGCCAGGTGCGCACCTTCGGCCGCAAGTGCTACAACTGCGG CCAGATCGGCCACCTGAAGAAGAACTGCCCCGTGCTGAACAAGCAGAACATCACCATCCAGGCCACCACCGCCGCCGCGGCCCCCGACCTGTGC CCCCGCTGCAAGAAGGGCAAGCACTGGGCCAGCCAGTGCCGCAGCAAGTTCGACAAGAACGGCCCAGCCCCTGAGCGGCAACGAGCAGCGCGGCCAGC

SEQ ID 63

ATGTGGGCAACCATTGTCGGGAAACGAGCAAAGGGGCCAGCCTCAGGCCCCACAACAACTGGGGCATTCCCAATTCAGCCATTTGTTCCTCAGGGT
TTTCAGGGACAACAACCACCCCACTGTCCCAAGTGTTTCAGGGAATAAGCCAGTTACCACAATACAACAATTGTCCCCCGCCACAAGCGGCAGTGCAGC
AGTAGATTTATGTACTATACAAGCAGTCTCTCTGCTTCCAGGGGAGCCCCCACAAAAAACCCCCACAGGGGTATATGGACCCCTGCCTAAGGGGACT
GTAGGACTAATCTTGGGACGATCAAGTCTAAATCTAAAAGGAGTTCAAATTCATACTAGTGTGTTGATTCAGACTATAAAGGCGAAATTCAATTGG
TTATTAGCTCTTCAATTCCTTGGAGTGCCAGTCCAAGAGACAGGATTGCTCAATTATTACTCCTGCCATACATTAAAGGGTGGAAATAGTGAAATAAA
AAGAATAGGAGGGCTTGGAAGCACTGATCCAACAGGAAAAGGCTGCATATTTGGCAAGTCAGGTCTCAGAGAACAGACCTGTGTGTAAGCCCATTATT
CAAGGAAAACAGTTTGAAGGGTTGGTAGACACTGGAGCAGATGTCTCTATCATTGCTTTAAATCAGTGGCCCAAAAAATTCGCCTAAACAAAAGGCTG
TTACAGGACTTGTCGGCATAGGCACAGCCTCAGAAGTGTTATCAAAGTACGGAGATTTTACATTGCTTAGGGCCAAAAAATCAGAAAGGTACTGTTCA
GCCAATGATTACTTCAATTCCTCTTAATCTGTGGGGTCGAGATTTTATTACAACAATGGGGTGCGGAAATCACCATGCCCGCTCCATCATATAGCCCC

ACGAGTCAAAAAATCATGACCAAGATGGGATATATACCAGGAAAGGGACTAGGGAAAAATGAAGATGGCATTAAAATTCCAGTTGAGGCTAAAATAA ATCAAGAAAGAAGGAATAGGGAATCCTTGCTAG

SEQ ID 64

SEQ ID 65

ATGAATAAATCAAGAAAGAGAAGGAATAGGGAATCCTTGCTAGGGCCGCCACTGTAGAGCCTCCTAAACCCATTACCATTAACTTGGAAAACAGAAA AACCAGTGTGGGTAAATCAGTGGCCGCTACCAAAACAAAAACTGGAGGCTTTACATTTATTAGCAAATGAACAGTTAGAAAAAGGGTCATATTGAGCC TTCGTTCTCACCTTGGAATTCTCCTGTGTTTGTAATTCAGAAGAAATCAGGCAAATGGCGTATGTTAACTGACTTAAGGGCTGTAAACGCCGTAATT ACCTCAGGGAATGCTTAATAGTCCAACTATTTGTCAGACTTTTGTAGGTCGAGCTCTTCAACCAGTTAGAGAAAAGTTTTCAGACTGTTATATTATTAAAAGACACTTAAAAACACTAAATGATTTTCAAAAATTACTAGGAGATATTAATTGGATTCGGCCAACTCTAGGCATTCCTACTTATGCCATGTCA AATTTGTTCTCTAACAGAGGAGACTCAGACTTAAATAGTAAAAGAATGTTAACCCCAGAGGCAACAAAAGAATTAAATTAGTGGAAGAAAAAAA TTCAGTCAGCGCAAATAAATAGAATAGATCCCTTAGCCCCACTCCAACTTTTGATTTTTGCCACTGCACATTCTCCAACAGGCATCATTATTCAAAA TACTGATCTTGTGGAGTGGTCATTCCTTCCTCACAGTACAGTTAAGACTTTTACATTGTACTTGGATCAAATAGCTACATTAATCGGTCAGACAAGA TTACGAATAATAAATTATGTGGGAATGACCCAGACAAAATAGTTGTCCCTTTAACCAAGGAACAAGTTAGACAAGCCTTTATCAATTCTGGTGCAT GGAAGATTGGTCTTGCTAATTTTGTGGGAATTATTGATAATCATTACCCAAAAACAAAGATCTTCCAGTTCTTAAAATTGACTACTTGGATTCTACC TAAAATTACCAGACGTGAACCTTTAGAAAATGCTCTAACAGTATTTACTGATGGTTCCAGCAATGGAAAAGCAGCTTACACAGGACCGAAAGAACGA ATTCTGCATATGTAGTACAGGCTACAAGGGATGTTGAGACAGCTCTAATTAAATATAGCATGGATGATCAGTTAAACCAGCTATTCAATTTATTACA ACAAACTGTAAGAAAAAGAAATTTCCCATTTTATATTACACATATTCGAGCACACACTAATTTACCAGGGCCTTTGACTAAAGCAAATGAACAAGCT GACTTACTGGTATCATCTGCACTCATAAAAGCACAAGAACTTCATGCTTTGACTCATGTAAATGCAGCAGGATTAAAAAAACAAATTTGATGTCACAT GGAAACAGGCAAAAGATATTGTACAACATTGCACCCAGTGTCAAGTCTTACACCTGCCCACTCAAGAGGCAGGAGTTAATCCCAGAGGTCTGTGTCC TAATGCATTATGGCAAATGGATGTCACCATGTACCTTCATTTGGAAGATTATCATATGTTCACGTAACAGTTGATACTTATTCACATTTCATATGG GCAACTTGCCAAACAGGAGAAAGTACTTCCCATGTTAAAAAACATTTATTGTCTTGTTTTGCTGTAATGGGAGTTCCAGAAAAAAATCAAAACTGACA ATGGACCAGGATATTGTAGTAAAGCTTTCCAAAAATTCTTAAGTCAGTGGAAAATTTCACATACAACAGGAATTCCTTATAATTCCCAAAGGACAGGC CATAGTTGAAAGAACTAATAGAACACTCAAAACTCAATTAGTTAAACAAAAAGAAGGGGGAGACAGTAAGGAGTGTACCACTCCTCAGATGCAACTT AATCTAGCACTCTATACTTTAAATTTTTTAAACATTTATAGAAATCAGACTACTACTTCTGCAGAACAACATCTTACTGGTAAAAAGAACAGCCCAC ATGAAGGAAAACTAATTTGGTGGAAAGATAATAAAAATAAGACATGGGAAATAGGGAAGGTGATAACGTGGGGGAGAGGTTTTGCTTGTGTTTCACC AGGAGAAAATCAGCTTCCTGTTTGGATACCCACTAGACATTTGAAGTTCTACAATGAACCCATCAGAGATGCAAAGAAAAGCACCTCCGGGGAGACG GAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAATGGTGACGTCAGAAGAACAGATGAAGTTGCCATCCACCAAGAAGACGCAGAGCCG CCTTGATGATTGTATCAATGGTGGTAAGTCTCCCTATGCCTGCAGGAGCAGCTGCAGCTAA

SEQ ID 66

 $\tt CTGCGCATCATCAAGCTGTGCGGCAACGACCCCGACAAGATCGTGGTGCCCCTGACCAAGGAGCAGGTGCGCCAGGCCTTCATCAACAGCGGCGCCCT$ GGAAGATCGGCCTGGCCAACTTCGTGGGCATCATCGACAACCACTACCCCAAGACCAAGATCTTCCAGTTCCTGAAGCTGACCACCTGGATCCTGCCGTGATCAAGACCCCCTACCAGAGCGCCCAGCGCGCCGAGCTGGTGGCCGTGATCACCGTGCTGCAGGACTTCGACCAGCCCATCAACATCATCAGCG A CAGCGCCTACGTGGTGCAGGCCACCCGCGACGTGGAGACCGCCCTGATCAAGTACAGCATGGACCAGCTGAACCAGCTGTTCAACCTGCTGCAGCAGACCGTGCGCAACCTCCCCTTCTACATCACCCACATCCGCCCCACACCACCTGCCCGGCCCCTGACCAAGGCCAACGAGCAGCCC ${\tt CAACGCCCTGTGGCAGATGGACGTGACCCACGTGCCCAGCTTCGGCCGCCTGAGCTACGTGCACGTGACCGTGACCCTACAGCCACTTCATCTGG}$ A CGGCCCCGGCTACTGCAGCAGGGCCTTCCAGAAGTTCCTGAGCCAGTGGAAGATCAGCCACCACCACCGGCATCCCCTACAACAGCCAGGGCCAGGCACGAGGGCAAGCTGATCTGGTGGAAGGACAACAAGAACAAGACCTGGGAGATCGGCAAGGTGATCACCTGGGGCCGGCTTCGCCTGCGTGAGCCCC $\tt CGGCGAGAACCAGCTGCCGTGTGGATCCCCACCCGCCACCTGAAGTTCTACAACGAGCCCATCCGCGACGCCAAGAAGAGACCACCAGCGCCGAGACC$ GAGACCAGCCAGAGCAGCACCGTGGACAGCCAGGACGAGCAGAACGGCGACGTGCGCCGCCGACGACGAGGTGGCCATCCACCAGGAGGGCCGCCGC CCAACCTGGGCACCACCAAGGAGGCCGACGCCGTGAGCTACAAGATCAGCCGCGAGCACAAGGGCGACACCAACCCCCGCGAGTACGCCGCCTGCAG CCTGGACGACTGCATCAACGGCGGCAAGAGCCCCTACGCCTGCCGCAGCAGCTGCAGCGCTTAA

SEQ ID 67

 ${\tt MNPSEMQRKAPPRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTQTPESMLLAALMIVSMVSAGVPNSSEE\\ {\tt TATIENGPA}$

SEQ ID 68

MNPSEMQRKAPPRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTQTPESMLLAALMIVSMVVYPTAPKRQR PSRTGHDDDGGFVEKKRGKCGEKQERSDCYCVCVERSRHRRLHFVLYA

SEQ ID 69

MGQTKSKIKSKYASYLSFIKILLKRGGVKVSTKNLIKLFQIIEQFCPWFPEQGTLDLKDWKRIGKELKQAGRKGNIIPLTVWNDWAIIKAALEPFQT
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PQKQVKENKTQPPVAYQYWPPAELQYRPPPESQYGYPGMPPAPQGRAPYPQPPTRLNPTAPPSRQGSKLHEIIDKSRKEGDTEAWQFPVTLEPMPP
GEGAQEGEPPTVEARYKSFSIKKLKDMKEGVKQYGPNSPYMRTLLDSIAHGHRLIPYDWEILAKSSLSPSQFLQFKTWWIDGVQEQVRRNRAANPPV
NIDADQLLGIGQNWSTISQQALMQNEAIEQVRAICLRAWEKIQDPGSTCPSFNTVRQGSKEPYPDFVARLQDVAQKSIADEKARKVIVELMAYENAN
PECQSAIKPLKGKVPAGSDVISEYVKACDGIGGAMHKAMLMAQAITGVVLGGQVRTFGRKCYNCGQIGHLKKNCPVLNKQNITIQATTTGREPPDLC
PRCKKGKHWASQCRSKFDKNGQPLSGNEQRQPQAPQQTGAFPIQPFVPQGFQGQQPPLSQVFQGISQLPQYNNCPPPQAAVQQ

SEQ ID 70

MGQTKSKIKSKYASYLSFIKILLKRGGVKVSTKNLIKLFQIIEQFCPWFPEQGTLDLKDWKRIGKELKQAGRKGNIIPLTVWNDWAIIKAALEPFQT
EEDSVSVSDAPGSCIIDCNENTRKKSQKETEGLHCEYVAEPVMAQSTQNVDYNQLQEVIYPETLKLEGKGPELVGPSESKPRGTSPLPAGQVPVTLQ
PQKQVKENKTQPPVAYQYWPPAELQYRPPPESQYGYPGMPPAPQGRAPYPQPPTRRLNPTAPPSRQGSKLHEIIDKSRKEGDTEAWQFPVTLEPMPP
GEGAQEGEPPTVEARYKSFSIKKLKDMKEGVKQYGPNSPYMRTLLDSIAHGHRLIPYDWEILAKSSLSPSQFLQFKTWWIDGVQEQVRRNRAANPPV
NIDADQLLGIGQNWSTISQQALMQNEAIEQVRAICLRAWEKIQDPGSTCPSFNTVRQGSKEPYPDFVARLQDVAQKSIADEKARKVIVELMAYENAN
PECQSAIKPLKGKVPAGSDVISEYVKACDGIGGAMHKAMLMAQAITGVVLGGQVRTFGRKCYNCGQIGHLKKNCPVLNKQNITIQATTTGREPPDLC
PRCKKGKHWASQCRSKFDKNGQPLSGNEQRGQPQAPQQTGAFPIQPFVPQGFQGQQPPLSQVFQGISQLPQYNNCPPPQAAVQQA

SEQ ID 71

MWATIVGKRAKGPASGPTTNWGIPNSAICSSGFSGTTTPTVPSVSGNKPVTTIQQLSPATSGSAAVDLCTIQAVSLLPGEPPQKTPTGVYGPLPKGT
VGLILGRSSLNLKGVQIHTSVVDSDYKGEIQLVISSSIPWSASPRDRIAQLLLLPYIKGGNSEIKRIGGLGSTDPTGKAAYWASQVSENRPVCKAII
QGKQFEGLVDTGADVSIIALNQWPKNWPKQKAVTGLVGIGTASEVYQSTEILHCLGPDNQESTVQPMITSIPLNLWGRDLLQQWGAEITMPAPSYSP
TSQKIMTKMGYIPGKGLGKNEDGIKIPVEAKINQEREGIGNPC

SEQ ID 72

MWATIVGKRAKGPASGPTTNWGIPNSAICSSGFSGTTTPTVPSVSGNKPVTTIQQLSPATSGSAAVDLCTIQAVSLLPGEPPQKTPTGVYGPLPKGT
VGLILGRSSLNLKGVQIHTSVVDSDYKGEIQLVISSSIPWSASPRDRIAQLLLLPYIKGGNSEIKRIGGLGSTDPTGKAAYWASQVSENRPVCKAII
QGKQFEGLVDTGADVSIIALNQWPKNWPKQKAVTGLVGIGTASEVYQSTEILHCLGPDNQESTVQPMITSIPLNLWGRDLLQQWGAEITMPAPSYSP
TSQKIMTKMGYIPGKGLGKNEDGIKIPVEAKINQEREGIGNPCA

SEQ ID 73

MNKSRKRRNRESLLGAATVEPPKPIPLTWKTEKPVWVNQWPLPKQKLEALHLLANEQLEKGHIEPSFSPWNSPVFVIQKKSGKWRMLTDLRAVNAVI QPMGPLQPGLPSPAMIPKDWPLIIIDLKDCFFTIPLABQDCEKFAFTIPAINNKEPATRFQWKVLPQGMLNSPTICQTFVGRALQPVREKFSDCYII HCIDDILCAAETKDKLIDCYTFLQAEVANAGLAIASDKIQTSTPFHYLGMQIENRKIKPQKIEIRKDTLKTLNDFQKLLGDINWIRPTLGIPTYAMS NLFSILRGDSDLNSKRMLTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPTGIIIQNTDLVEWSFLPHSTVKTFTLYLDQIATLIGQTR LRIIKLCGNDPDKIVVPLTKEQVRQAFINSGAWKIGLANFVGIIDNHYPKTKIFQFLKLTTWILPKITRREPLENALTVFTDGSSNGKAAYTGPKER VIKTPYQSAQRAELVAVITVLQDFDQPINIISDSAYVVQATRDVETALIKYSMDDQLNQLFNLLQQTVRKRNFPFYITHIRAHTNLPGPLTKANEQA DLLVSSALIKAQELHALTHVNAAGLKNKFDVTWKQAKDIVQHCTQCQVLHLPTQEAGVNPRGLCPNALWQMDVTHVPSFGRLSYVHVTVDTYSHFIW ATCQTGESTSHVKKHLLSCFAVMGVPEKIKTDNGPGYCSKAFQKFLSQWKISHTTGIPYNSQGQAIVERTNRTLKTQLVKQKEGGDSKECTTPQMQL NLALYTLNFLNIYRNQTTTSAEQHLTGKKNSPHEGKLIWWKDNKNKTWEIGKVITWGRGFACVSPGENQLPVWIPTRHLKFYNEPIRDAKKSTSAET ETSQSSTVDSQDEQNGDVRRTDEVAIHQEGRAANLGTTKEADAVSYKISREHKGDTNPREYAACSLDDCINGGKSPYACRSSCS

SEQ ID 74

MNKSRKRRNRESLLGAATVEPPKPIPLTWKTEKPVWVNQWPLPKQKLEALHLLANEQLEKGHIEPSFSPWNSPVFVIQKKSGKWRMLTDLRAVNAVI
QPMGPLQPGLPSPAMIPKDWPLIIIDLKDCFFTIPLAEQDCEKFAFTIPAINNKEPATRFQWKVLPQGMLNSPTICQTFVGRALQPVREKFSDCYII
HCIDDILCAAETKDKLIDCYTFLQAEVANAGLAIASDKIQTSTPFHYLGMQIENRKIKPQKIEIRKDTLKTLNDFQKLLGDINWIRPTLGIPTYAMS
NLFSILRGDSDLNSKRMLTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPTGIIIQNTDLVEWSFLPHSTVKTFTLYLDQIATLIGQTR
LRIIKLCGNDPDKIVVPLTKEQVRQAFINSGAWKIGLANFVGIIDNHYPKTKIFQFLKLTTWILPKITRREPLENALTVFTDGSSNGKAAYTGPKER
VIKTPYQSAQRAELVAVITVLQDFDQPINIISDSAYVVQATRDVETALIKYSMDDQLNQLFNLLQQTVRKRNFPFYITHIRAHTNLPGPLTKANEQA
DLLVSSALIKAQELHALTHVNAAGLKNKFDVTWKQAKDIVQHCTQCQVLHLPTQEAGVNPRGLCPNALWQMDVTHVPSFGRLSYVHVTVDTYSHFIW
ATCQTGESTSHVKKHLLSCFAVMGVPEKIKTDNGPGYCSKAFQKFLSQWKISHTTGIPYNSQGQAIVERTNRTLKTQLVKQKEGGDSKECTTPQMQL
NLALYTLNFLNIYRNQTTTSAEQHLTGKKNSPHEGKLIWWKDNKNKTWEIGKVITWGRGFACVSPGENQLPVWIPTRHLKFYNEPIRDAKKSTSAET
ETSQSSTVDSQDEQNGDVRRTDEVAIHQEGRAANLGTTKEADAVSYKISREHKGDTNPREYAACSLDDCINGGKSPYACRSSCSA

SEQ ID 75

 ${\tt TCTGCTTTGAGATGCTGTTAATCTGTAACCCTAGCCCCAACCCTGTGCTCACAGAAACAGGTGCTGTTGACTCAAGGTTTAATGGATTCAGGGCT}$ GTGCAGGATGTGCTTTGTTAAACAAATGCTTGAAGGCAGCAAGCTTGTTAAGAGTCATCACCACTCCCTAATCTCAAGTAAGCAGGGACACAAACAC TGCGGAAGGCCGCAGGGACCTCTGCCTAGGAAAGCCAGGTGTTGTCCAAGGTTTCTCCCCATGTGACAGTCTGAAATATGGCCTCTTGGGAAGGGAA GGCATCTGTCTCCTGCTCATCCCTGGGCAATGGAATGTCTTGGTGTAAAGCCTGATTGTATATGCCATCTACTGAGATAGGAGAAAACTGCCTTAGG ${\tt GCTGGAGGTGGGACATGCTGGCGGCAATACTGCTCTTTAAGGCATTGAGATGTTTATGTATATGCACATCAAAAGCACAGCACTTTTTTCTTTACCT\\$ AGAGATAATGATCAATAAATACTGAGGGAACTCAGAGACCGGTGCGGCGCGGTCCCTCCATATGCTGAGCGCCGGTCCCCTGGGCCCACTTTTCTTT CTCTATACTTTGTCTCTGTTGTCTTTTCTTTTTCTCAAGTCTCTCGTTCCACCTGAGGAGAAATGCCCACAGCTGTGGAGGCGCAGGCCACTCCATCTG GTGCCCAACGTGGATGCTTTTCTCTAGGGTGAAGGGACTCTCGAGTGTGGTCATTGAGGACAAGTCAACGAGAGTTCCCGAGTACGTCTACAGTGA GCCTTGTGGTAAGCTTGGGCGCTCGGAAGAAGCCAGGGTTAATGGGGCAAACTAAAAGTAAAGTCTCTCATTCCACCTGATGAGAAACACCCAGAGG GGGCCCACGAGAGACTTGGAAATGAATGGCAGGATTTTAGGCGCTGGACTTGGGTTCGGGGCACCTGGCCTTTCCTTGTGTATTTCTCCTACTGTCT TTTTCTCTGGGGACCCAGAGAGAGGAGGCGTTTTCACCACAGCCGAACAGGGCAGCCCCAGCACCCGGGACCCAGCGGGACTTTGCCAAGGGGA TGGACCTGGCTGGGCCACGCGGCTGTTTGTGTAGGGAAAAGAAGACAGATCACACTGTTACTGTGTCTATGTAGAAAAGGAAGACATAAACTCCAT TTTGAGCTGTACTAAGAAAATTATTTTGCCTTGACCTGCTGTTAACCTGTAACTGTAGCCCCAACCCTGTGCTCAAAGAAACATGTGCTGTATGGA ATCAAGGTTTAAGGGATCAAGGGCTGTACAGGATGTGCCTTGTTAACAATGTGTTTACAGGCAGTATGCTTGGTAAAAGTCATCGCCATTCTCCATT CTCCATTAATCAGGGGCACGATGCACTGCGGAAAGCCACAGGGACCTCTGCCCGAGAAAGCCTGGGTATTGTCCAAGGCTTCCCCCCACTGAGACAG CCTGAGATACGGCCTCGTGGGAAGGGAAAGACCTGACCGTCCCCCAGCCCGACACCCGTAAAGGGTCTGTGCTGAGGAGGATTAGTAAAAGGGGAAG GCCTCTTGCAGTTGAGATAAGAGGAAGGCCTCCGTCTCCTGCATGTCCTTGGGAATGGAATGTCTTTGGTGTAAAACCCGATAGTACATTCCTTCTAT TCTGAGAGAAAAACCACCCTGTGGCTGGAGGTGAGATATGCTAGCGGCAATGCTGCTCTGTTACTCTTTGCTACACTGAGATGTTTGGGTGGAGA GAAGCATAAATCTGGCCTATGTGCACATCTGGGCACAGAACCTCCCCTTGAACTTGTGACACAGATTCCTTTGTTCACATGTTTTCCTGCTGACCTT $\tt CTCCCCACTATCGCCCTGTTCTCCCACCGCATTCCCCTTGCTGAGATAGTGAAAATAGTAATCTGTAGATACCAAGGGAACTCAGAGACCATGGCCG$ GTGTGGTCATTGAGGACAAGTTGACGAGAGAGTCCCAAGTACGTCCACGGTCAGCCTTGCGGTAAGCTTGTGTGCTTAGAGGAACCCAGGGTAACGA TGGGGCAAACTGAAAGTAAATATGCCTCTTATCTCAGCTTTATTAAAATTCTTTTAAGAAGAGGGGGGGTTAGAGCTTCTACAGAAAATCTAATTAC GCTATTTCAAACAATAGAACAATTCTGCCCATGGTTTCCAGAACAGGGAACTTTAGATCTAAAAGATTGGGAAAAAATTCGCCAAAGAATTAAAACAA GCAAATAGGGAAGGTAAAATCATCCCACTTACAGTATGGAATGATTGGGCCATTATTAAAGCAACTTTAGAACCATTTCAAACAGGAGAAGATATTG TTTCAGTTTCTGATGCCCCTAAAAGCTGTGTAACAGATTGTGAAGAAGAGGCAGGGACAGAATCCCAGCAAGGAACGGAAAGTTCACATTGTAAATA TGTAGCAGAGTCTGTAATGGCTCAGTCAAACGCAAAATGTTGACTACAGTCAATTACAGGAGATAATATACCCTGAATCATCAAAATTGGGGGAAGGA GGTCCAGAATCATTGGGGCCATCAGAGCCTAAACCACGATCGCCATCAACTCCTCCTCCTGTGGTTCAGATGCCTGTAACATTACAACCTCAAACGC AGGTTAGACAAGCACAAACCCCAAGAGAAAATCAAGTAGAAAAGGGACAGAGTCTCTATCCCGGCAATGCCAACTCAGATACAGTATCCACAATATCA GCCGGTAGAAAATAAGACCCAACCGCTGGTAGTTTATCAATACCGGCTGCCAACCGAGCTTCAGTATCGGCCTCCTTCAGAGGTTCAATACAGACCT CAAGCGGTGTGCCCAAATAGCACGGCACCATACCAGCAACCCACAGCGATGGCGTCTAATTCACCAGCAACACAGGACGCGGCGTGTATC

TCTTGAGGCATGGCGGTTCCTGGTAATTTTACAACTGGTACAGGCCGGGGAAGAGACTCAAGTAGGAGCGCCTGCCCGAGCTGAGACTAGATGTGAA CCTTTCACCATGAAAATGTTAAAAGATATAAAGGAAGGAGTTAAACAATATGGATCCAACTCCCCTTATATAAGAACATTATTAGATTCCATTGCTC ATGGAAATAGACTTACTCCTTATGACTGGGAAATTTTTGGCCAAATCTTCCCTTTCATCCTCTCCAGTATCTACAGTTTAAAACCTGGTGGATTGATGG AGTACAAGAACAGGTACGAAAAAATCAGGCTACTAAGCCCACTGTTAATATAGACGCAGACCAATTGTTAGGAACAGGTCCAAATTGGAGCACCATT AACCAACAATCAGTGATGCAGAATGAGGCTATTGAACAAGTAAGGGCTATTTGCCTCAGGGCCTGGGGAAAAATTCAGGACCCAGGAACAGCTTTCC CTATTAATTCAATTAGACAAGGCTCTAAAGAGCCATATCCTGACTTTGTGGCAAGATTACAAGATGCTGCTCAAAAGTCTATTACAGATGACAATGC CCGAAAAGTTATTGTAGAATTAATGGCCTATGAAAATGCAAATCCAGAATGTCAGTCGGCCATAAAGCCATTAAAAGGAAAAGTTCCAGCAGGAGTT GATGTAATTACAGAATATGTGAAGGCTTGTGATGGGATTGGAGGAGCTATGCATAAGGCAATGCTAATGGCTCAAGCAATGAGGGGGGCTCACTCTAG AGGGTTTTCAAGGACAACAACCCCTACAGAAAATACCACCACTTCAGGGAGTCAGCCAATTACAACAATCCAACAGCTGTCCCGCGCCACAGCAGC AGCACCGCAGTAGATTTATGTTCCACCCAAATGGTCTTTTTACTCCCTGGAAAGCCCCCACAAAAGATTCCTAGAGGGGTATATGGCCCGCTGCCAG AAGGGAGGCTAGGCCTTTGAGGGAGATCAAGTCTAAATTTGAAGGGAGTCCAAATTCATACTGGGGTAATTTATTCAGATTATAAAGGGGGAATTCA GTTAGTGATCAGCTCCACTGTTCCCCGGAGTGCCAATCCAGGTGATAGAATTGCTCAATTACTGCTTTTTGCCTTATGTTAAAATTGGGGAAAACAAA AAGGAAAGAACAGGAGGGTTTGGAAGTACCAACCCTGCAGGAAAAGCTGCTTATTGGGCTAATCAGGTCTCAGAGGATAGACCCGTGTGTACAGTCA CTATTCAGGGAAAGAGTTTGAAGGATTAGTGGATACCCAGGCTGATGTTTCTGTCATCGGCATAGGTACTGCCTCAGAAGTGTATCAAAGTGCCATG ATGGCATGCAGAGATTACTATCCCAGCCTCCCTATACAGCCCCAGGAATAAAAAAATCATGACTAAAATGGGATAGCTCCCTAAAAAGGGACTAGGA AAGAAGTCCCAATTGAGGCTGAAAAAAAATCAAAAAAGGAAAAGGGATTGGGGCATCCTTTTTAGGAGCGGTCACTGTAGAGCCTCCAAAACCCATTCCA TTAACTTGGGGGAAAAAAAAAACAACTGTATGGTAAATCAGCAGCGCTTCCAAAACAAAACTGGAGGCTTTACATTTATTAGCAAAGAAACAATTAG AAAAAGGACATTGAGCCTTCATTTTCGCCTTGGAATTCTGTTTGTAATTCAGAAAAAATCCGGCAGATGGCGTATAATGCCGTAATTCAACCCATGG GGGCTCTCCCACCCCGGTTGCCCTCTCCAGCCATGGTCCCCTTTAATTATAATTGATCTGAAGGATTGCTTTTTTACCATTCCTCTGGCAAAACAGG ATTTTGAAAAATTTGCTTTTACCACACCAGCCTAAATAATAAAGAACCAGCCACCAGGTTTCAGTGGAAAGTATTGCCTCAGGGAATGCTTAATAGT TCAACTATTTGTCAGCTCAAGCTCTGCAACCAGTTAGAGACAAGTTTTCAGACTGTTACATCGTTCACTATGTTGATATTTTTGTGTGCTGCAGAAAC TTCCGTTACTTGGGAATGCAGGTAGAGGAAAGGAAAATTAAACCACAAAAAATAGAAATAAGAAAAGACACATTAAAAGCATTAAATGAGTTTCAAA AGTTGCTAGGAGATACTAATTGGATTTGGAGATATTAATTGGATTTTGGCCAACTCTAGGCATTCCTACTTATGCCATGTCAAATTTGTTCTCTTTCT AAATAGAATAGATCACTTGGCCCCACTCCAAATTTTGATTTTTGCTACTGCACATTCCCTAACAGGCATCATTGTTCAAAATACAGATCTTGTGGAG TGGTCCTTCCTTCCTCACAGTACAATTAAGACTTTTACATTGTACTTGGATCAAATGGCTACATTAATTGGTCAGGGAAGATTATGAATAACAT TGTGTGGAAATGACCCAGATAAAATCACTGTTCCTTTCAACAAGCAACAGGTTAGACAAGCCTTTATCAATTCTGGTGCATGGCAGATTGGTCTTGC CGATTTTGTGGGAATTATTGACAATCGTTACCCCAAAACAAAATCTTCCAGTTTTTAAAATTGACTACTTGGATTTTACCTAAAGTTACCAAACAT AAGCCTTTAAAAAATGCTCTGGCAGTGTTTACTGATGGTTCCAGCAATGGAAAAGTGGCTTACACCGGGCCAAAAGAATGAGTCATCAAAACTCAGT ATCACTTGACTCAAAGAGCAGAGTTGGTTGCCGTCATTACAGTGTTAACAAGATTTTAATCAGTCTATTAACATTGTATCAGATTCTGCATATGTAG TACAGGCTACAAAGGATATTGAGAGAGCCCTAATCAAATACATTATGGATGATCAGTTAAACCCGCTGTTTAATTTGTTACAACAAAATGTAAGAAA AAGAAATTTCCCATTTTATATTACTCATATTCGAGCACACACTAATTTACCAGGGCCTTTAACTAAAGCAAATGAACAAGCTGACTTGCTAGTATCA ATATTGTACAACATTGCACCCAGTGTCAGATTCTACACCTGGCCACTCAGGAGGCAAGAGTTAATCCCAGAGGTCTATGTCCTAATGTGTTATGGCA AATGGATGTCATGCACGTACCTTCATTTGGAAAATTGTCATTTGTCCATGTGACAGTTGATACTTATTCACATTTCATATGGGCAACCTGCCAGACA GGAGAAAGTACTTCCCATGTTAAAAGACATTTATTATCTTGTTTTCCTGTCATGGGAGTTCCAGAAAAAGTTAAAACAGACAATGGGCCAGGTTACT GTAGTAAAGCAGTTCAAAAATTCTTAAATCAGTGGAAAATTACACATACAATAGGAATTCTCTATAATTCCCAAGGACAGGCCATAATTGAAAGAAC TAAATGTTTTAAACATTTATAGAAATCAGACCACTACCTCTGCAGAACAACATCTTACTGGTAAAAGGAACAGCCCACATGAAGGAAAACTGATTTG GTGGAAAGATAATAAAAATAAAACATGGGAAATGGGGAAGGTGATAACGTGGGGGAGAGGTTTTGCTTGTGTTTCACCAGGAGAAAATCAGCTTCCT GTTTGGATACCCACTAGACATTTAAAGTTCTACAATGAACTCACTGGAGATGCAAAGAAAAGTGTGGAGATGGAGACACCCCAATCGACTCGCCAGG TAAACAAAATGGTGATATCAGAAGAACAGAAAAAGTTGCCTTCCATCAAGGAAGCAGAGTTGCCAATATAGGCACAATTAAAGAAGCTGACACAGTT AGCTAAAAAAAAAGCCTAGAGAATACAAAGGTGACACCAACTCCAGAGAATATGCTGCTGCTGCTGATGATGTTTTCAACGGTGGTAAGTCTT TTGAAGTAGATGTTAATAATAGTGCATGGGTGCCTGGCCCCACAGATGACTGTTGCCCTGCCCAACCTGAAGAAGGAATGATGATGAATATTTCCAT GGCCCATTAATCCAGCCTATGACGGTGATGTAACTGAAAGGCTGGACCAGGTTTATAGAAGGTTAGAATCACTCTGTCCAAGGAAATGGGGTGAAAA GGGAATTTCATCACCTTGACCAAAGTTAGTCCTGTTACTGGTCCTGAACATCCAGAATTAGGAAGCTTACTGTGGCCTCACACCACATTAGAATTTG $\tt TTCTGGAAATCAAGCTATAGGAACAAGAGATCGTAAGTCATATTATACTATCAACCTAAATTCCAGTCTGACAATTCCTTTGCAAAATTGTGTAAAA$ CTCCCTTATATTGCTAGTTGTAGGAAAAACATAGTTATTAAACCTGATTCCCAAACCATAATCTGTGAAAATTGTGGAATGTTTACTTGCATTGATT CATCCATATTTTAACGGAAGTATTAAAAGGAATTCTAACTAGATCCAAAAGATTCATTTTTACTTTGATGGCAGTGATTATGGGCCTCATTGCAGTC ACAGCTACTGCTGCGGCTGCTGGAATTGCTTTACACTCCTCTGTTCAAACTGCAGAATACGTAAATGATTGGCAAAAAGAATTCCTCAAAATTGTGGA ATTCTCAGATCCAAATAGATCAAAAATTGGCAAACCAAATTAATGATCTTAGACAAACTGTCATTTGGATGGGAGAGGCTCATGAGCTTGGAATATC TTTTTCAGTTACGATGTGACTGGAATACATCAGATTTTTGTGTTACACCACAAGCCTATAATGAGTCTGAGCATCACTGGGACATGGTTAGATGCCA GAGTGCAGTGGCGTGATCTCAGCTCACTGCAAGTTCCGCCTCCTGGGTTTACACCATTCTCCTGCCTCAGCCTCCCAAGTAGTTGGGACTACAGGAG $\tt TGCCCACCTTGGCCTCCCAAAGTGCTGGGATTACAGTCGTGAGCCACCGTGCCCAGCCAAGAAAAATTTTTGAGGCATCAAAAGCCCATTTAAATT$ TGGTGCCAGGAACGGAGACAATCGTGAAAGCTGCTGATAGCCTCACAAATCTTAAGCCAGTCACTTGGGTTAAAAGCATCAGAAGTTTCACTATTGT AAATTTCATATTAATCCTTGTATGCCTGTTCTGTTGTTAGTCTACAGGTGTATCCAGCAGCTCCAAAGAGACAGCAACCAGCAAGAATGGGCC ATAGTGACGATGGTGGTTTTTGTCAAAAAGAAAAGGGGGGGATATGTAAGGAAAAGGAGACACATTTCACTGTGTCTATGTAGAAAAGGAAGACA TGGAGGGACCAGCTGGTGCTGCATCAGGAAACATAAATTGTGAAGATTTCTTGGACATTTATCAGTTTCCAAAATTAATACTTTTATAATTTCTTAC TTCACATGTGTTTGAACAATATGAAATCAGTGCACCTTGAAAATGAACAGAATAACAGTGATTTTAGGGAACAAAGGAAGACAACCATAAGGTCTGA $\tt CTGCCTGAGGGGTCGGGCAAAAAGCCATATTTTCTTCTTGCAGAGAGCCTATAAATGGACGTGCAAGTAGGAGAGATATTGCTAAATTCTTTTCCT$ AGATAAGGACTGAGATACGCCCTGGTCTCCTGCAGTACCCTCAGGCTTACTAGGATTGGGAAACCCCAGTCCTGGTAAATTTGAGGTCAGGCCGGTT $\tt CTTTGCTCTGAACCCTGTTTTCTGTTAAGATGTTTATCAAGACAATACATGCACCGCTGAACATAGACCCTTATCAGGAGTTTCTGATTTTGCTCTG$ TTTTAAAATCCCTAATAAAAACTTGCTGGTTTTGTGGCTCAGGGGGGGCATCATGGACCTACCAATACGTGATGTCACCCCCGGTGGCCCAGCTGTAA CACCTGATGAGAAATACCCACAGGTGTGGAGGGGCTGGCCCCCTTCA

SEQ ID 76

ATGGGGCAAACTGAAAGTAAATATGCCTCTTATCTCAGCTTTATTAAAATTCTTTTAAGAAGAGGGGGGAGTTAGAGCTTCTACAGAAAATCTAATTA CGCTATTTCAAACAATAGAACAATTCTGCCCATGGTTTCCAGAACAGGGAACTTTAGATCTAAAAGATTGGGAAAAAATTGGCAAAGAATTAAAACA AGCAAATAGGGAAGGTAAAATCATCCCACTTACAGTATGGAATGATTGGGCCATTATTAAAGCAACTTTAGAACCATTTCAAACAGGAGAAGATATT GTTTCAGTTTCTGATGCCCCTAAAAGCTGTGTAACAGATTGTGAAGAAGAGGGCAGGACAGAATCCCAGCAAGGAACGGAAAGTTCACATTGTAAAT ATGTAGCAGAGTCTGTAATGGCTCAGTCAACGCAAAATGTTGACTACAGTCAATTACAGGAGATAATATACCCTGAATCATCAAAATTGGGGGAAAGG AGGTCCAGAATCATTGGGGCCATCAGAGCCTAAACCACGATCGCCATCAACTCCTCCTCCTCCGTGGTTCAGATGCCTGTAACATTACAACCTCAAACG CAGGTTAGACAAGCACAAACCCCAAGAGAAAATCAAGTAGAAAGGGACAGAGTCTCTATCCCGGCAATGCCAACTCAGATACCGCAATATCCACAATATC AGCCGGTAGAAAATAAGACCCAACCGCTGGTAGTTTATCAATACCGGCTGCCAACCGAGCTTCAGTATCGGCCTCCTTCAGAGGTTCAATACAGACC TCAAGCGGTGTGTCCTGTGCCAAATAGCACGGCACCATACCAGCAACCCACAGCGATGGCGTCTAATTCACCAGCAACACAGGACGCGGCGCTGTAT ATCTTGAGGCATGGCGGTTCCTGGTAATTTTACAACTGGTACAGGCCGGGGAAGAGACTCAAGTAGGAGCGCCTGCCCGAGCTGAGACTAGATGTGA CATGGAAATAGACTTACTCCTTATGACTGGGAAATTTTGGCCAAATCTTCCCTTTCATCCTCTCAGTATCTACAGTTTAAAACCTGGTGGATTGATG ${\tt GAGTACAAGAACAGGTACGAAAAAATCAGGCTACTAAGCCCACTGTTAATATAGACGCAGACCAATTGTTAGGAACAGGTCCAAATTGGAGCACCAT}$ TAACCAACAATCAGTGATGCAGAATGAGGCTATTGAACAAGTAAGGGCTATTTGCCTCAGGGCCTGGGGAAAAATTCAGGACCCAGGAACAGCTTTC CCTATTAATTCAATTAGACAAGGCTCTAAAGAGCCATATCCTGACTTTGTGGCAAGATTACAAGATGCTGCTCAAAAGTCTATTACAGATGACAATG $\tt CCCGAAAAGTTATTGTAGAATTAATGGCCTATGAAAATGCAAATCCAGAATGTCAGTCGGCCATAAAGCCATTAAAAGGAAAAGTTCCAGCAGGAGT$ TGATGTAATTACAGAATATGTGAAGGCTTGTGATGGGATTGGAGGAGCTATGCATAAGGCAATGCTAATGGCTCAAGCAATGAGGGGGCTCACTCTA CAGGGTTTTCAAGGACAACCCCTACAGAAAATACCACCACTTCAGGGAGTCAGCCAATTACAACAATCCAACAGCTGTCCCGCGCCACAGCAGC CAGCACCGCAGTAA

SEQ ID 77

 $\tt CCCTGTTCCAGACCATCGAGCAGTTCTGCCCCTGGTTCCCCGAGCAGGGCACCCTGGACCTGAAGGACTGGGAGAAGATCGGCAAGGAGCTGAAGCA$ AGCCCGTGGAGAACAAGACCCAGCCCCTGGTGGTGTACCAGTACCGCCTGCCCACCGAGCTGCCAGTACCGCCCCCCCAGCGAGGTGCAGTACCGCCCGCCCTTCACCATGAAGATGCTGAAGGACATCAAGGAGGGCGTGAAGCAGTACGGCAGCAGCACCCCTACATCCGCACCCTGCTGGACAGCATCGCC CACGGCAACCGCCTGACCCCCTACGACTGGGAGATCCTGGCCAAGAGCAGCCTGAGCAGCCAGTACCTGCAGTTCAAGACCTGGTGGATCGACG GCGTGCAGGAGCAGGTGCGCAAGAACCAGGCCACCAAGCCCACCGTGAACATCGACGCCGACCAGCTGCTGGGCACCGGCCCCAACTGGAGCACCAT ${\tt CAACCAGCAGAGCGTGATGCAGAACGAGGCCATCGAGCAGGTGCGCGCCATCTGCCGCGCCTGGGGCAAGATCCAGGACCCCGGCACCGCCTTC}$ $\tt CCCGCAAGGTGATCGTGGAGGCTGATGGCCTACGAGAACGCCAACCCCGAGTGCCAGAGGCGCCATCAAGCCCCTGAAGGGCAAGGTGCCCGCCGGCGT$ GGACGTGATCACCGAGTACGTGAAGGCCTGCGACGGCATCGGCGCGCCCATGCACAAGGCCATGCTGATGGCCCAGGCCATGCGCGGCCTGACCCTG GGCGGCCAGGTGCGCACCTTCGGCAAGAAGTGCTACAACTGCGGCCAGATCGGCCACCTGAAGCGCAGCTGCCCCGTGCTGAACAAGCAGAACATCA TCAACCAGGCCATCACCGCCAAGAACAAGAAGCCCAGCGGCCTGTGCCCCAAGTGCGGCAAGGGCAAGCACTGGGCCAACCAGTGCCACGCAAGTT CCGCCCCCAGGCTTAA

SEQ ID 78

MGQTESKYASYLSFIKILLRRGGVRASTENLITLFQTIEQFCPWFPEQGTLDLKDWEKIGKELKQANREGKIIPLTVWNDWAIIKATLEPFQTGEDI
VSVSDAPKSCVTDCEEEAGTESQQGTESSHCKYVAESVMAQSTQNVDYSQLQEIIYPESSKLGEGGPESLGPSEPKPRSPSTPPPVVQMPVTLQPQT
QVRQAQTPRENQVERDRVSIPAMPTQIQYPQYQPVENKTQPLVVYQYRLPTELQYRPPSEVQYRPQAVCPVPNSTAPYQQPTAMASNSPATQDAALY
PQPPTVRLNPTASRSGQGGALHAVIDEARKQGDLEAWRFLVILQLVQAGEETQVGAPARAETRCEPFTMKMLKDIKEGVKQYGSNSPYIRTLLDSIA
HGNRLTPYDWEILAKSSLSSSQYLQFKTWWIDGVQEQVRKNQATKPTVNIDADQLLGTGPNWSTINQQSVMQNEAIEQVRAICLRAWGKIQDPGTAF
PINSIRQGSKEPYPDFVARLQDAAQKSITDDNARKVIVELMAYENANPECQSAIKPLKGKVPAGVDVITEYVKACDGIGGAMHKAMLMAQAMRGLTL
GGQVRTFGKKCYNCGQIGHLKRSCPVLNKQNIINQAITAKNKKPSGLCPKCGKGKHWANQCHSKFDKDGQPLSGNRKRGQPQAPQQTGAFPVQLFVP
QGFQGQQPLQKIPPLQGVSQLQQSNSCPAPQQAAPQ

SEQ ID 79

MGQTESKYASYLSFIKILLRRGGVRASTENLITLFQTIEQFCPWFPEQGTLDLKDWEKIGKELKQANREGKIIPLTVWNDWAIIKATLEPFQTGEDI VSVSDAPKSCVTDCEEEAGTESQQGTESSHCKYVAESVMAQSTQNVDYSQLQEIIYPESSKLGEGGPESLGPSEPKPRSPSTPPPVVQMPVTLQPQT QVRQAQTPRENQVERDRVSIPAMPTQIQYPQYQPVENKTQPLVVYQYRLPTELQYRPPSEVQYRPQAVCPVPNSTAPYQQPTAMASNSPATQDAALY PQPPTVRLNPTASRSGQGGALHAVIDEARKQGDLEAWRFLVILQLVQAGEETQVGAPARAETRCEPFTMKMLKDIKEGVKQYGSNSPYIRTLLDSIA HGNRLTPYDWEILAKSSLSSSQYLQFKTWWIDGVQEQVRKNQATKPTVNIDADQLLGTGPNWSTINQQSVMQNEAIEQVRAICLRAWGKIQDPGTAF PINSIRQGSKEPYPDFVARLQDAAQKSITDDNARKVIVELMAYENANPECQSAIKPLKGKVPAGVDVITEYVKACDGIGGAMHKAMLMAQAMRGLTL GGQVRTFGKKCYNCGQIGHLKRSCPVLNKQNIINQAITAKNKKPSGLCPKCGKGKHWANQCHSKFDKDGQPLSGNRKRGQPQAPQQTGAFPVQLFVP QGFQGQQPLQKIPPLQGVSQLQQSNSCPAPQQAAPQA

SEQ ID 80

TGTGCCGCACAAGGCCGTGGCGGTAGGGTATGTGTCTGAAAATGAGCTCGGAGATTGGGCTCGCACCGCTGACGCAGATGGAAGACTTAAGGCAGCG GCAGAAGAAGATGCAGCCAGCTGAGTTGTTTCTGATAAGAGTCAGAGGTAACTCCCGTTGCGGTGCTGTTAACGGTGGAGGGCAGTGTAGTCT ${\tt GAGCAGTACTCGTTGCTGCCGCGCGCCCACCAGACATAATAGCTGACAGACTAACAGACTGTTCCTTTCCATGGGTCTTTTCTGCAGTCACCGTCq}$ qaacctqatcaccctqttccaqaccatcqaqcaqttctqccctqqttccccqaqcaqqqcacctqqaaqqactqqqaaaqatcqqcaaq qaqctqaaqcaqqccaaccqcqaqqqcaaqatcatccccctqaccqtqtqqaacqactqqqccatcatcaacqccaccctqqaqcccttccaqaccq qcqaggacatcgtqaqcqtqacqcccccaaqaqctqcqtqaccqactqcqaqqaqqaqqcqqcaccqaqaqccaqcaqqaqcaq ccactgcaaqtacqtgqccqaqaqcqtqatqqcccaqaqcacccaqaacqtgqactacaqccaqctgcaqqaqatcatctaccccqaqaqcaqcaaq ${\tt cccccagtaccagcccgtggagaacaagacccagccctggtgtgtaccagtaccgcctgcccaccgagctgcagtaccgccccccaqcgagqtg}$ cagtaccqccccaqqccqtqtqccccqtqcccaacaqcaccqcccctaccaqcaqcccaccqccatqqccaqcaacaqcccqccaccaqqacq ccgccctgtaccccagcccccaccgtgcgcctgaacccaccqccaqccqcaqcqqccaggqqccctgcacqccqtqatcqacqaqqcccq accegetgegagecetteaccatgaagatgetgaaggacateaaggaggegtgaagcagtaeggeageagcagcaccetacateegcaccetgetgg acagcatcgcccacggcaaccgcctgaccccctacgactqqqaqatcctqqccaaqaqcctqagcaqcaqccaqtacctqcaqttcaaqacctq qtgqatcqacqqcqtqcaqqaqcaqqtqcaaqaaccaqqccaccaaqcccacqtqaacatcqacqccqaccaqctqctqqqcaccqqcccaac qcaccqccttccccatcaacaqcatccqccaqqqcaqcaaqqaqccctaccccqacttcqtqqccqcctqcaqqaqqccqccaqaaqaqcatcac cgacgacaacgcccgcaaggtgatcgtggagctgatggcctacgagaacgccaaccccgagtgccagagcgccatcaagcccctgaaqqqcaaqqtq cccgccggcgtggacgtgatcaccgagtacgtgaaggcctqcgacqqcatcgqcqccatqcacaaqqccatqctqatqqcccaqqccatqcqcq gcctgaccctgggcggccaggtgcgcaccttcggcaaqaaqtqctacaactqcqqccaqatcqqccacctqaaqcqcaqctqcccqtqctqaacaa qcagaacatcatcaaccaqqccatcaccqccaaqaacaaqaaqcccaqcqqcctqtqcccaaqtqcqqcaaqqcactqqqccaaccaqtqc cacagcaagttcgacaaggacggccagccctgagcggcaaccgcaaqcqcggccaqccccaqqcccccaqcaqaccqqqccttccccqtqcaqc tgttcgtgccccagggcttccagggccagcagcccctgcagaagatccccccctgcagggcgtgagccagctgcagcagcagcagcagctgccccgc CCCCcagcaggccgcccccaggcttaagaattcAGACTCGAGCAAGTCTAGAAAGCCATGGATATCGGATCCACTACGCGTTAGAGCTCGCTGATC ACAATAGCAGGGGGTGGGCGAAGAACTCCAGCATGAGATCCCCGGCTTGGAGGATCATCCAGCCGGCGTCCCGGAAAACGATTCCGAAGCCCAACC TCGTCAAGAAGGCGATAGAAGGCGATGCGCTGCGAATCGGGAGCGCCGATACCGTAAAGCACGAGGAAGCGGTCAGCCCATTCGCCGCCAAGCTCTT CAGCAATATCACGGGTAGCCAACGCTATGTCCTGATAGCGGTCCGCCACACCCAGCCGGCCACAGTCGATGAATCCAGAAAAAGCGGCCATTTTCCAC CATGATATTCGGCAAGCAGCATCGCCATGGGTCACGACGACGACGTCGCCGTCGGGCATGCGCCCTTGAGCCTGGCGAACAGTTCGGCTGGCGCG AGCCCCTGATGCTCTTCGTCCAGATCATCCTGATCGACAAGACCGGCTTCCATCCGAGTACGTGCTCGATGCGATGCTGTTTCGCTTGGTCGA ATGGGCAGGTAGCCGGATCAAGCGTATGCAGCCGCCGCATTGCATCAGCCATGATGGATACTTTCTCGGCAGGAGCAAGGTGAGATGACAGGAGATC CGGCGGCATCAGAGCAGCCGATTGTCTGTTGTGCCCAGTCATAGCCGAATAGCCTCTCCACCCAAGCGGCCGGAGAACCTGCGTGCAATCCATCTTG TTCAATCATGCGAAACGATCCTCATCCTGTCTCTTGATCAGATCTTGATCCCCTGCGCCATCAGATCCTTGGCGGCAAGAAAGCCATCCAGTTTACT TTGCAGGGCTTCCCAACCTTACCAGAGGGCGCCCCAGCTGGCAATTCCGGTTCGCTTGCTGTCCATAAAACCGCCCAGTCTAGCTATCGCCATGTAA GCCCACTGCAAGCTACCTGCTTTCTCTTTGCGCTTGCGTTTTCCCTTGTCCAGATAGCCCAGTAGCTGACATTCATCCGGGGTCAGCACCGTTTCTG CGGACTGGCTTTCTACGTGTTCCGCTTCCTTTAGCAGCCCTTGCGCCCTGAGTGCTTGCGGCAGCGTGAAGCTAATTCATGGTTAAATTTTTTGTTAA ATCAGCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAAGAATAGCCCGAGATAGGGTTGAGTGTTGTTCCAGTTTGGA ACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAACCGTCTATCAGGGCGATGGCCGGATCAGCTTATGCGGTGTGAAATA TATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAA $\tt CCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGACCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCG$ ACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTC ${\tt TCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCGCTCCAAGCTGGGCTGTGTCCACGAACC}$ $\tt CCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCCACTGGT$ AACAGGATTAGCAGAGGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCT GCAGCAGATTACGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACTGAACGGTGATCCCCACCGGAATTGCG

SEO ID 81

ATGAACCCAAGCGAGATGCAAAGAAAAGCACCTCCGCGGAGACGGAGACATCGCAATCGAGCACCCGTTGACTCACAAGATGAACAAAATGGTGACGT CAGAAGAACAGATGAAGTTGCCATCCACCAAGAAGGCAGAGCCGCCAACTTGGGCACAACTAAAGAAGCTGACGCAGTTAGCTACAAAATATCTAGA GAACACAAAGGTGACACAAACCCCAGAGAGTATGCTGCTTGCAGCCTTGATGATTGTATCAATGGTGGTAAGTCTCCCTATGCCTGCAGGAGCAGCT GCAGCTAACTATACCTACTGGGCCTATGTGCCTTTCCCGCCCTTAATTCGGGCAGTCACATGGATGATAATCCTACAGAAGTATATGTTAATGATA

GTGTATGGGTACCTGGCCCCATAGATGATCGCTGCCCTGCCAAACCTGAGGAAGAAGGGATGATAAATATTTCCATTGGGTATCATTATCCTCC CACATGGTAAGCGGGATGTCACTCAGGCCACGGGTAAATTATTTACAAGACTTTTCTTATCAAAGATCATTAAAATTTAGACCTAAAGGGAAACCTT GCCCCAAGGAAATTCCCAAAGAATCAAAAAATACAGAAGTTTTAGTTTGGGAAGAATGTGTGGCCAATAGTGCGGTGATATTACAAAACAATGAATT ${\tt CGGAACTATTATAGATTGGGCACCTCGAGGTCAATTCTACCACAATTGCTCAGGACAAACTCAGTCGTGTCCAAGTGCACAAGTGAGTCCAGCTGTT}$ GATAGCGACTTAACAGAAAGTTTAGACAAACATAAGCATAAAAAATTGCAGTCTTTCTACCCTTGGGAATGGGGAAAAAAGGAATCTCTACCCCAA AACTTTAGAAACAAGAGATCGTAAGCCATTTTATACTATTGACCTGAATTCCAGTCTAACAGTTCCTTTACAAAGTTGCGTAAAGCCCCCCTTATATG $\tt CTAGTTGTAGGAAATATAGTTATTAAACCAGACTCCCAGACTATAACCTGTGAAAATTGTAGATTGCTTACTTGCATTGATTCAACTTTTAATTGGC$ TGAAGTATTAAAAGGTGTTTTAAATAGATCCAAAAGATTCATTTTTACTTTAATTGCAGTGATTATGGGATTAATTGCAGTCACAGCTACGGCTGCT GTAGCAGGAGTTGCATTGCACTCTTCTGTTCAGTCAGTAAACTTTGTTAATGATTGGCAAAAAAATTCTACAAGATTGTGGAATTCACAATCTAGTA ATGTGACTGGAATACGTCAGATTTTTGTATTACACCCCAAATTTATAATGAGTCTGAGCATCACTGGGACATGGTTAGACGCCATCTACAGGGAAGA GAAGATAATCTCACTTTAGACATTTCCAAATTAAAAGAACAAATTTTCGAAGCATCAAAAGCCCATTTAAATTTGGTGCCAGGAACTGAGGCAATTG AAAAGAAAAGGGGGAAATGTGGGGAAAAGCAAGAGAGATCAGATTGTTACTGTGTCTGTGGCCTAA

SEQ ID 82

GCGTGTGGGTGCCCGGCCCCATCGACGACCGCTGCCCCGCCAAGCCCGAGGAGGAGGGCATGATCAACATCAGCATCGGCTACCACTACCCCCC ${\tt CACATGGTGAGCGGCATGAGCCTGCGCCCCCGGTGAACTACCTGCAGGACTTCAGCTACCAGCGCAGCCTGAAGTTCCGCCCCAAGGGCAAGCCCT}$ GCCCCAAGGAGATCCCCAAGGAGGAGCAAGAACACCGAGGTGCTGGTGTGGGAGGAGTGCGTGGCCAACAGCGCCGTGATCCTGCAGAACAACGAGTT $\tt CGGCACCATCATCGACTGGGCCCCCGCGGCCAGTTCTACCACAACTGCAGCGGCCAGACCCAGAGCTGCCCCAGCGCCCAGGTGAGCCCCGCCGTG$ GACAGCGACCTGACCGAGAGCCTGGACAAGCACAAGCACAAGAAGCTGCAGAGCTTCTACCCCTGGGAGTGGGGCGAGAAGGGCATCAGCACCCCCC GACCCTGGAGACCCGCGACCGCAAGCCCTTCTACACCATCGACCTGAACAGCCTGACCGTGCCCCTGCAGAGCTGCGTGAAGCCCCCCTACATG $\tt CTGGTGGTGGGCAACATCGTGATCAAGCCCGACAGCCAGACCATCACCTGCGAGAACTGCCGCCTGCTGACCTGCATCGACAGCACCTTCAACTGGC$ GTGGCCGGCGTGGCCCTGCACAGCAGCGTGCAGAGCGTGAACTTCGTGAACGACTGGCAGAAGAACAGCACCCGCCTGTGGAACAGCCAGAGCAGCA TCGACCAGAAGCTGGCCAACCAGATCAACGACCTGCGCCAGACCGTGATCTGGATGGGCGACCGCCTGATGAGCCTGGAGCACCGCTTCCAGCTGCA GAGGACAACCTGACCCTGGACATCAGCAAGCTGAAGGAGCAGATCTTCGAGGCCAGCAAGGCCCACCTGAACCTGGTGCCCGGCACCGAGGCCATCG AAGCGCAAGGGCGGCAACGTGGGCAAGAGCAAGCGCGACCAGATCGTGACCGTGAGCGTGGCCTAA

SEQ ID 83

MNPSEMQRKAPPRRRHRNRAPLTHKMNKMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTQTPESMLLAALMIVSMVVSLPMPAGAA AANYTYWAYVPFPPLIRAVTWMDNPTEVYVNDSVWVPGPIDDRCPAKPEEEGMMINISIGYHYPPICLGRAPGCLMPAVQNWLVEVPTVSPICRFTY HMVSGMSLRPRVNYLQDFSYQRSLKFRPKGKPCPKEIPKESKNTEVLVWEECVANSAVILQNNEFGTIIDWAPRGQFYHNCSGQTQSCPSAQVSPAV DSDLTESLDKHKHKKLQSFYPWEWGEKGISTPRPKIVSPVSGPEHPELWRLTVASHHIRIWSGNQTLETRDRKPFYTIDLNSSLTVPLQSCVKPPYM LVVGNIVIKPDSQTITCENCRLLTCIDSTFNWQHRILLVRAREGVWIPVSMDRPWEASPSVHILTEVLKGVLNRSKRFIFTLIAVIMGLIAVTATAA VAGVALHSSVQSVNFVNDWQKNSTRLWNSQSSIDQKLANQINDLRQTVIWMGDRLMSLEHRFQLQCDWNTSDFCITPQIYNESEHHWDMVRRHLQGR EDNLTLDISKLKEQIFEASKAHLNLVPGTEAIAGVADGLANLNPVTWVKTIGSTTIINLILLLVCLFCLLLVCRCTQQLRRDSDHRERAMMTMAVLS KRKGGNVGKSKRDQIVTVSVA